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The Ohio State University

Fertility-Related Data in the 1982 National Longitudinal Surveys of Work Experience of Youth: An Evaluation of Data Quality and Some Preliminary Analytical Results

by Frank L. Mott

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Frank L. Mott

With the assistance of Paula Baker, R. Jean Haurin
and William Marsiglio

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Summary

This report evaluates the quality of the fertility-related data in the 1982 round of the National Longitudinal Survey of Work Experience of Youth and summarizes highlights of findings from these fertility data.

The evaluation indicates that the overall quality of the female live birth information is equivalent to that of the Current Population survey, that the abortion data is significantly under-reported, and that the other fertility-related information appears equivalent in quality to that of available data. The quality of the male birth records are inferior to those of the female respondents, and should be used with greater care by fertility researchers using this data set. The report specifies the potential magnitude of reporting errors, how these potential error levels are related to characteristics of the respondents, and the procedures used to clean up the fertility records.

The analytical sections of the report examine differentials in period and cohort birth rates, sexual activity and contraception, birth wantedness, and pregnancy outcome for selected respondent characteristics within cross-tabular and multivariate frameworks. Characteristics considered include race and ethnicity, religion, education, and various aspects of family stability, social class, and geographic residence. The multivariate results suggest the utility of a variety of background factors and more proximate respondent attitudes and behaviors for investigating a variety of adolescent and young adult fertility-related attitudes and behavior.

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I. INTRODUCTION

The 1982 round of the National Longitudinal Survey of Work Experience of Youth (hereafter termed the NLS) included a substantial battery of fertility-related data items collected under the auspices of the Behavioral Sciences Branch of the Center for Population Research of the National Institute of Child Health and Human Development. These included complete live birth histories for the 6084 young men in the survey and complete pregnancy histories for their 6040 female counterparts. In addition, information on current sexual activity and contraceptive use, fertility intentions, and child care was collected for respondents of both sexes. For the female respondents only, retrospective information on contraceptive use and whether or not each pregnancy was wanted was collected for all prior pregnancies.

This report, based on these data, has several objectives. The section which follows will briefly describe the data set, focusing on its utility for fertility research. The next section discusses the quality of the data, including procedures which were implemented to improve the internal consistency of the birth information. Subsequent sections will highlight some tabular and preliminary multivariate results. The intent of these sections is to provide potential data users with a variety of basic tabulations and descriptions of the fertility-related data. From a research perspective, this information should leave potential users in a better position to decide whether these data are appropriate for meeting their specific objectives. The multivariate results included in a final analytical section are included primarily to suggest potentially useful directions for further research.

II. THE DATA SET

The NLS is a nationally-representative longitudinal (panel) sample survey which included 12,686 respondents age 14 to 21 in the initial survey round in early 1979. As may be seen in Table 1, the sample includes approximately equal numbers of male and female youth and an over-representation of black, Hispanic and economically disadvantaged white youth so as to permit statistically reliable ethnic and racial comparisons. The original sample also included a special military supplement of about 800 men and 400 women in the service at the time. Appropriate weights are available so that the above population subgroups may be combined to provide overall national and regional population statistics. The respondents have been re-interviewed each year through 1983 and will be interviewed again at least in 1984 and 1985.

The data presented and evaluated in this report are from the 1982 survey round by which time the sample had reached ages 17 to 24 years. In the 1982 survey round, interviews with 12,124 of the original 12,686 respondents were completed. As may also be noted in Table 1, attrition from the original sample is under 5 percent, with little variation evidenced between the different racial and ethnic groups. In general, response rates to the specific questionnaire items, with the possible exception of the income data, are uniformly high. The data have been collected for the Ohio State University Center for Human Resource Research by the National Opinion Research Center at the University of Chicago.

In addition to the fertility data, the various survey rounds have on a continuing basis collected detailed information on a variety of topics including the respondent's education, training and employment experiences, income and asset information, other demographic behavior, self-reports on delinquent behavior, alcohol and drug use, attitudinal scales on self-esteem

Table 1 Interviews Completed in 1979 and 1982 by Race and Sex

Race	1979 Total	1979 Male	1979 Female	1982 Total	Attrition rate	Males	Attrition rate	Females	Attrition rate
Total	12686	6398	6288	12124	4.4	6084	4.9	6040	3.9
White	7510	3793	3717	7188	4.3	3618	4.6	3570	4.0
Disadvantaged white	2044	947	1097	1940	5.1	903	4.6	1037	5.5
Hispanic	2002	999	1003	1882	6.0	934	6.5	948	5.5
Black	3174	1606	1568	3054	3.8	1532	4.6	1522	2.9

and ideas about the appropriate roles for women. Virtually all respondents also completed the three-hour Armed Services Vocational Aptitude Battery (ASVAB), and reports on the characteristics of their last high school attended were received from the high schools of about three-quarters of the sample. All the data collected through the 1982 fourth round interview, along with accompanying documentation, are now available to the public for 400 dollars. Also, a more limited extract tape including the variables revised in our fertility data evaluation process described below, as well as a number of constructed fertility variables is now available. The variables on this extract tape are specified in an appendix to this report.

The NLS data set is described in somewhat greater detail in the _1983-1984 National Longitudinal Surveys Handbook_, which is available gratis from the NLS User's Office at the Center for Human Resource Research, The Ohio State University, 5701 North High Street, Worthington, Ohio 43085.

The NLS data set has several major strengths for fertility-related analysis. Its national representativeness and over-representation of important minorities permit generalizable fertility analyses of the behavior patterns and attitudes of contemporary American youth--white, black and Hispanic. In addition, in-depth comparisons can be made between the behavior patterns of young men and women. Finally, the sample sizes are sufficiently large so that it is possible to compare population subgroups of young mothers and fathers with confidence that the subgroup statistics are nationally representative and that comparisons between these groups can be statistically meaningful. It may be seen in Table 2 that as of 1982 the NLS sample includes relatively large numbers of black, white and Hispanic mothers and fathers. Given the youthfulness of the sample, most of the children of the respondents are below school age and were low parity births. The vast majority of the

Table 2 Characteristics of Live Births by Race and Sex of Respondent
(Number of Sample Cases)

Categories	Hispanic males	Black males	White males	Hispanic females	Black females	White females
Age of children						
< 1	73	125	214	145	190	358
1	64	104	171	86	181	299
2	51	95	128	88	181	273
3	31	78	106	76	123	188
4	19	31	61	49	114	148
5	7	34	29	37	95	99
6	6	18	15	26	81	68
7	4	11	4	13	40	29
8	2	7	1	7	17	16
9	0	5	0	4	9	6
10+	0	2	0	0	3	2
Sex of children						
Male	134	267	373	287	541	742
Female	124	235	355	247	493	741
NA	0	12	10	0	0	0
Living arrangements of children						
In R's household - spouse present	159	135	519	337	256	1002
In R's household - spouse not present	27	41	35	172	702	384
With absent parents	65	309	146	5	10	22
With other relatives	1	15	7	9	36	14
Foster care	0	0	0	3	2	4
Adoptive parents	0	1	4	2	1	23
Long-term instit.	0	0	0	1	1	1
Away at school						
Deceased	2	2	10	4	26	30
Other	0	2	4	0	0	2
NA	5	6	11	0	2	10
Total children	256	506	734	533	1030	1481
Number of children by respondent						
No children	751	1169	3079	604	859	2539
1 child	126	247	374	203	396	678
2 children	44	89	130	103	189	271
3 children	9	16	29	28	56	66
4 children	3	7	3	9	18	12
5 children	1	2	-	1	4	3
6 children	-	-	-	-	-	-
7 children	-	-	-	-	-	1
NA	1	2	2	0	0	0
Total	258	511	733	534	1034	1488
Number of respondents with children	184	363	538	344	663	1031

children of the female respondents are living with their mothers but a significant number of the children of the male respondents are not present in the respondent's household. Table 3 provides some national statistics in this regard. It may be seen that 94 percent of the children of the female respondents are living with their mothers in comparison with 67 percent of the children to the male respondents. The male statistics vary considerably by race. For example, only about one third of the children of black male respondents are living with their fathers. As we will see, these variations have significant implications when judging the quality of the data which has been collected.

Over the next few survey years, the number of parents in the sample will grow substantially and the overall sample of parents and children will become increasingly representative of a broader spectrum of American parents and children. At this time, as subsequent analyses will show, the sample of parents includes disproportionate numbers of early childbearers, due to the fact that the oldest respondent in the sample now is only attaining 25 years of age. In particular, given the knowledge that men on the average begin childbearing at later ages than do women, the fathers represented in this sample are undoubtedly even more of a selected out population than are the women who have had children.

The very large numbers of young children and new parents also suggest the considerable utility of this data set for analyses focusing on maternal and child health issues, particularly as they relate to early childbearing. The 1983 and forthcoming 1984 survey include a substantial battery of questions on maternal care during pregnancy and child care immediately after birth. In conjunction with the data already available, it will then be possible to use this data set to develop national statistics on socioeconomic and racial

Table 3 Distribution of NLS Children by Parental Residence Status, Marital Status, Race and Sex

(Numbers in thousands)

	Total		White		Hispanic		Black	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Children of female respondents	6383	10.0	4395	100.0	639	100.0	1608	100.0
Living with mother	6015	94.2	4168	94.8	609	95.3	1499	93.2
Mother never married	1333	20.9	341	7.8	113	17.7	872	54.2
Mother spouse present[b]	4009	62.8	3234	73.6	409	64.0	367	22.8
Mother sep/wid/div	933	14.6	593	13.5	84	13.1	257	16.0
Not living with mother	368	5.8	227	5.2	30	4.7	109	6.8
Mother never married	156	2.4	70	1.6	15	2.3	71	4.4
Mother spouse present[b]	109	1.7	83	1.9	9	1.4	18	1.1
Mother sep/wid/div	102	1.6	73	1.7	5	0.8	20	1.2
Children of male respondents	3103	100.0	2062	100.0	285	100.0	756	100.0
Living with father	2084	67.2	1612	78.2	214	75.1	256	33.9
Father never married	124	4.0	47	2.3	20	7.0	54	7.1
Father spouse present[b]	1911	61.6	1537	74.5	183	64.2	188	24.9
Father sep/wid/div	51	1.6	30	1.5	9	3.2	12	1.6
Not living with father[a]	1019	32.8	450	21.8	71	24.9	500	66.1
Father never married	596	19.2	157	7.6	29	10.2	410	54.2
Father spouse present[b]	132	4.3	96	4.7	2	0.7	34	4.5
Father sep/wid/div	292	9.4	197	9.6	41	14.4	52	6.9

[a] The vast majority are living with the mother.

[b] Spouse of parent is not necessarily the child's parent.

differentials in maternal and infant health care and their short-run social and demographic consequences.

III. FERTILITY DATA EVALUATION*

Two types of quality evaluation procedures were carried out in evaluating the NLS fertility histories. First, because live birth information for all births which occurred before the 1981 interview have been reported on more than once (either 1979, 1981 or 1981 _and_ 1982), it was possible to reconcile discrepant reports across surveys for a substantial proportion of all discrepant reports, as will be detailed below. This resolution formed the basis for most of the birth history data cleanup we were able to complete. The revised variables on the fertility extract tape prepared for NICHD were revised on the basis of these procedures.

Following these internal data consistency checks, a series of external data comparisons were carried out; these comparisons will be described in detail throughout this report. Period and cohort birth statistics were compared with appropriate Current Population Survey data. Data on pregnancies not resulting in a live birth were compared with national abortion statistics from the National Center for Health Statistics and with appropriate data from the teenage fertility studies carried out by Melvin Zelnik and John Kantner. Also, fertility expectation data and data on contraceptive use have been compared with other appropriate data sources.

A. Evaluation of Mothers' Birth Records

In the initial survey year, 1979, all of the respondents were asked to indicate the dates of birth (month-day-year) of any children who had been born live to them. The 1980 and 1981 surveys updated the birth records by asking about children born since the preceding survey. Finally, the 1982 survey collected from all of the female respondents a complete pregnancy history including the dates of birth of all live births as well as the date of termination (and length of gestation) for all pregnancies which did not result in a live birth. It is important to emphasize that this information was collected independently of the birth information collected in the preceding three surveys. That is, there were no cross-survey probes designed to elicit information about the reasons for any inconsistencies between information collected in the 1979-1981 and 1982 survey rounds.

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*The author is particularly grateful to R. Jean Haurin for her substantial assistance with the evaluation analysis.

In addition to the birth date information in the 1982 survey, supplementary information on the sex and residence of all live births (including date of death for infants who died) was collected. Also, in each survey, household record data including the sex and age of all the respondents' own children in the household was collected, independent of the information collected in the fertility record.

The above information has permitted two basic internal consistency checks of the NLS birth history records; namely, (1) consistency of dates of births of identical children born prior to the 1981 interview date as reported in the 1982 interview and in either the 1979, 1980 or 1981 interview and (2) consistency in the reporting of children ever born (including the appearance or non-appearance of specific births) between the 1982 birth record and the 1979-1981 birth records. Essentially, then, internal reporting inconsistencies considered in this evaluation include examination of discrepancies in dates of birth (month and year only) between the earlier and later records, the appearance of pre-1981 births in the 1982 records which had not previously been reported between 1979 and 1981 and the non-appearance in the 1982 birth history of births which had been reported earlier.

A computerized comparison of the 1982 with the earlier records identified 228 female respondents as having at least one mis-match of the above types in their birth record--representing 14.4 percent of birth records for the women who were reported as ever having borne a child by 1981. As may be seen in Tables 4 through 6 (the "before" statistics for mothers), the largest part of these record discrepancies were dating mismatches between an earlier and later record and only a small percent a discrepancy between reports in the actual number of children ever born. In addition, the vast majority of the misreports were by mothers who were living with their children. However, the likelihood of a misreport is much greater where the child is not living with the mother.

The overall discrepancy rates for mothers (in Table 5) show no significant overall difference by race or marital status. This overall similarity, however, disguises major discrepancies which appear when the ethnic groups are stratified by marital status. In particular, black mothers who have never been married (the largest group) or who are currently married have discrepancy rates not dissimilar to the overall female discrepancy rate, but black women who are separated or divorced are much more likely to have a reporting error in their birth record.

The discrepancies in birth records can be due to any of several causes. First, they can reflect transcription or key punch errors in the actual process of transferring the raw data from the interview form to the computer tape. This error can be detected by an interview schedule check of those respondent records where a dating discrepancy between the earlier and later record is in evidence.

A second and major source of error is where the respondent reports different dates for a particular child on two different interviews. As will

Table 4 Number of Discrepant Reports in Birth Records for Male and Female Respondents Before and After Data Cleanup by Child Household Status in 1982

	Respondent is Father						Respondent is Mother					
	Additional child reported in 1982		Children deleted in 1982		Dating discrepancy between reports		Additional child reported in 1982		Children deleted in 1982		Dating discrepancy between reports	
	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After
Child in household	37	14	13	11	69	22	24	6	7	3	143	29
Child with other parent only	67	59	9	7	82	34	1	0	0	0	6	0
Child with other relative	6	6	1	1	1	2	2	1	0	0	9	3
Child with adoptive parent	1	1	0	0	1	2	4	0	2	1	5	3
Deceased	2	0	0	0	2	2	9	0	0	0	6	2
Other	3	2	0	0	0	0	0	0	0	0	1	1
No children in household	0	0	42	38	0	0	0	0	10	5	0	0
Interviewer error	0	0	0	1	5	0	0	0	0	0	0	0
Total	116	82	65	58	160	62	40	7	19	9	169	38

NOTE: Child household status relates to status of respondents oldest child at 1982 interview. "Additional child" refers to child appearing in 1982 birth record which based on its age should also have appeared in an earlier record. "Deleted" children refer to children who should have appeared in the 1982 record as they had legitimately appeared in an earlier record. Dating discrepancy means that either month or year of birth differed between 1982 and at least one of the 1979-1981 records. Discrepant report response is so the respondent and not the birth-statistics specify the number of respondents who had at least one discrepant report in their birth records. In this record, a misreport on number of children takes precedence over a dating misreport, as it represents a more serious error.

Table 5 Reporting Discrepancy Rate Before and After Data Cleanup by 1982 Household Status, Marital Status and Race

	Respondent is Father								Respondent is Mother							
	Additional child reported in 1982		Children deleted in 1982		Dating discrepancy between reports		Total discrepancy rate		Additional child reported in 1982		Children deleted in 1982		Dating discrepancy between reports		Total discrepancy rate	
	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After
Household status of children																
Child in household	9.2	3.5	3.2	2.7	17.1	5.4	29.5	11.6	1.6	0.5	0.5	0.2	9.7	2.0	11.8	2.6
With other parent only	26.8	23.6	3.6	2.8	32.8	13.6	63.2	40.0	6.3[a]	0.0[a]	0.0[a]	0.0[a]	33.3[a]	0.0[a]	38.9[a]	0.0[a]
Other	66.7[a]	50.0[a]	5.6[ab]	5.6[ab]	22.2[a]	33.3[a]	94.4[a]	88.9[a]	17.6	1.2	14.1[b]	7.1[b]	24.7	10.6	56.5	18.8
Marital status																
Never married	30.4	25.3	16.1	16.6	29.5	12.9	76.0	54.8	3.7	0.4	1.6	1.0	10.6	3.3	15.9	4.7
Married spouse present	9.7	4.5	5.2	3.5	18.1	6.4	33.0	14.4	1.8	0.4	1.1	0.4	10.7	2.0	13.6	2.7
Other marital statuses	10.2	8.3	8.3	7.4	20.4	7.4	38.9	23.1	2.6	0.7	0.7	0.4	11.3	2.2	14.6	3.3
Race/Ethnicity																
Hispanic	7.3	2.4	4.1	4.1	26.8	11.4	38.2	17.9	2.0	0.8	1.6	0.8	12.0	3.2	15.5	4.8
Black	29.2	22.8	13.2	12.0	28.0	10.4	70.4	45.2	3.5	0.4	0.9	0.4	11.5	3.3	15.9	4.0
White	9.6	6.2	7.6	6.5	15.8	6.2	33.0	18.9	2.0	0.4	1.3	0.6	9.8	1.5	13.1	2.6

NOTE: See Table 4. Denominations for discrepancy rates are numbers of ever fathers or mothers as of 1981 survey but household/marital status is as of 1982 survey. This is because discrepancies can only be evaluated for births which occurred (or didn't occur) prior to 1981 surveys.

Table 6 Reporting Discrepancy Rate Before and After Data Cleanup by Race and Marital Status

	Respondent is Father						Respondent is Mother					
	Never married		Married spouse present		Other marital status		Never married		Married spouse present		Other marital status	
	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After
Hispanic	60.7 (28)	28.6	28.4 (74)	12.2	42.9* (21)	23.8	22.4 (58)	6.9	15.6 (154)	4.5	5.3 (38)	2.6
Black	78.9 (152)	57.2	58.9 (73)	23.3	52.0 (25)	36.0	14.4 (326)	3.4	14.1 (135)	3.7	28.7 (85)	7.1
White	75.7 (37)	64.9	27.0 (256)	12.5	32.3 (62)	16.1	16.8 (107)	7.5	12.9 (526)	1.9	11.2 (151)	1.3

NOTE: Sample sizes in parentheses. See Tables 4 and 5 for definitional notes.

be described below, in many instances errors of this type can be resolved given the considerable information on interview and birth dates, children ever born and ages of children from the birth and household records. However, in a fair proportion of these mismatches, the discrepancy cannot be resolved without an intensive followup interview probe with the respondent, something not feasible at this time.

Discrepancies between reports on the presence or absence of specific children are more difficult to resolve because in many instances an element of subjectivity must enter into the decision making. Generally, such discrepancies are adjusted in this birth history analysis only in those instances where the evidence is overwhelmingly definitive regarding which piece of information is correct--such as where an available birth date from either an earlier or later record is entirely consistent with evidence from the respondent's household record. One significant instance of this adjustment is where generally consistent evidence between a later reported birth date and household record information is further corroborated by the report either that a particular child is now deceased or (particularly in the case of mothers' reports) is now living with the other parent. Also, in a few cases, examination of the actual interview schedule at the NORC which include the names of children, clarified whether or not a specific child was being reported on.

Finally, it is emphasized that consistency of reporting is no guarantee of accuracy as a respondent can mis-report in an identical fashion at different points in time. Such misreports may involve multiple inaccurate (but identical) reports of birth dates or of the existence or non-existence of particular births. Also as may be seen in Table 4, there is considerable "netting out" of birth misreporting in the aggregate as infants reported at an earlier date are no longer reported at a later date and vice versa. For example, as may be noted in Table 4, the women in the survey reported 40 births in 1982 which had not appeared in an earlier record (even though the child was presumably alive preceding the 1981 survey) and 19 births at an earlier survey which no longer appear in 1982. Thus, the "net" discrepancy level (40-19=21) is only about one third of the gross level (40+19=59). Similarly, "netting out" can occur on mis-dating, dampening potential effects on period fertility rates. With regard to the "net" mis-reporting of birth events, in a later section we will present comparisons between these data and other comparable data sources, in particular current population survey data.

Internal and external data checks can obviously be more comprehensive with respect to live birth events for young women than for pregnancy events which do not result in a live birth. First, for live births more data are available for comparative purposes. Also, live births must of necessity be at least approximately nine months or more apart, whereas the minimum temporal separation for non-live births is not as well-defined.

The percentage of live births matched identically for the young mothers is significantly higher than for the fathers. This gender difference appears in spite of the fact that the potential for a young mother to recollect a previously unreported birth probably was greater, reflecting the fact that the 1982 retrospective fertility reporting for the women probed for all live births as well as all terminated pregnancies, voluntary or otherwise. Also, everything else being equal, the average mother has a greater likelihood of having an error in her fertility record since she has had on average more births than her comparably aged male counterpart.

The internal record checks for the young women's (and young men's) birth history involved several phases. The first phase of the data check, the most straightforward, involved the reclassification of birth dates from intervals which were clearly impossible into intervals consistent with all other reported evidence. Typically, this involved reclassification of the following type; a birth was originally reported by a mother at, for example, the 1980 interview as having occurred since the preceding interview (e.g., August 1, 1979). At the 1982 interview, the mother reports the same birth as having occurred on June 1, 1980--clearly impossible, as we have incontrovertible evidence of the birth as having already occurred at a preceding interview date. In addition, the earlier birth date is known to be consistent with the age of the infant at all available interview dates. Errors of this type were quite frequent and were completely resolvable because the longitudinal nature of the data set permitted resolution of the temporal discrepancy. Also, a very large proportion of all those births to these younger women have occurred between the first (1979) and 1981 interviews. Whenever the change in report moved across an interview date, resolution frequently became feasible. Resolutions of this type among the young women reduced the number of respondents who had discrepant birth histories from 228 to 191.

In the second phase of the internal record check, information from the household records and birth histories, in conjunction with precise knowledge of interview dates, was utilized to resolve discrepancies not readily resolvable through the Phase I procedure. The most generalizable resolution included the following procedures: The ages of a child on all interview dates was completely consistent with the date of birth reported at either the earlier (1979, or interview following year of birth) or later (1982) interview. It is worth reiterating that the ages as reported in the various household records (covering up to four survey years), the earlier birth date report and the latter birth date report represent independent reports all relating to the same vital event. If all the reports except one are consistent, this represents, in our opinion, overwhelming evidence of the likely accuracy of that particular birth date. This technique, in a limited number of instances, permitted resolution of discrepancies (far beyond "reasonable doubt") in either earlier or later reports on number of children ever born. For example, a young woman reports an earlier birth (let's say, one which occurred in June 1980) only at the 1982 survey but not at an earlier point (in this case it should also have been reported at the 1981 survey). However, in the residence information the mother indicates that the live birth is now deceased. While not common, this occurred several times, undoubtedly reflecting the greater willingness by some women to verbalize an infant's death after some time has passed since the event. This kind of reporting pattern permitted rectifying the earlier (1981) retrospective report.

One other somewhat analogous example is where a mother indicated a birth at the 1979 interview date (let's say the birth date was June 1978), and independently reiterates the presence of that child in the 1979 household record (male - age zero), 1980 household record (male - age one), and 1981 household record (male - age two). However, in the 1982 survey, the own child is mentioned in the household record (male - age three) but for unknown reasons is not mentioned in the birth history (an admittedly rare event), is not mentioned in either record, or more commonly has a birthdate in the 1982 record. Possible reasons for these discrepancies include the death of the child or its absence associated with parental marital transitions. In any event, where the historical evidence is overwhelming that the woman indeed had this birth, or that the earlier date is in all likelihood correct, internal dating consistency is warranted and the 1982 birth record adjusted. Internal checks of all of the above types reduced the internal inconsistency level from

191 to 99. The vast majority of adjustments involved date changes rather than changes in the number of children ever born. Also, in most instances, the changes involved only one dating change although in some cases a respondent reported discrepant dates for a series (two or three) of children. In this type of misreport it was clear that the respondent misdated one child's birth and then sequentially misdated all the others.

It is important to reiterate that no changes were made in any record unless there was substantial, indeed overwhelming, evidence of the likely accuracy of one set of reports in comparison with the other. Changes were only made where complete consistency was evidenced within one pattern of reports (e.g., all household record reports and one reported birth date). In this regard, as will be indicated below, a much higher resolution rate was possible for the mothers' birth records than for the fathers' records, because, as we will see below, a very high proportion of discrepant dating and children ever born reports among fathers were from those who were not living with their children. Thus, the critical element of relevant information from a household record was not available.

The final component of the dating rectification procedure involved reviewing the original interview schedule at the NORC in Chicago. Several kinds of data checks were possible through this procedure. First, a matching of dates of birth or the interview schedule with the date recorded on the computer tape permitted resolution of a few discrepancies due to key punching errors.

Perhaps even more important, in a number of instances dates of birth were spelled out on the interview schedule face sheet or the fertility schedule. Thus, for example, a child reported as under one in the household record might be identified more precisely according to his or her month of age on the schedule face sheet permitting precise matching with the records and thus more definitive identification as to which child in the household he or she should be matched with. Also, in some instances where a discrepancy in month of birth had existed across survey years, the spelling out of a month of birth (e.g., November rather than 11) permitted cross-survey date resolution. In a few instances, the presence of a child's name in conjunction with his or her age and sex permitted precise cross-survey matching which was not previously possible. In this regard, there were a few instances where knowledge of a child's last name helped resolve whether or not a child in all likelihood was the own-born child of a respondent or an adopted or step child. All of the above permitted a further reduction in female birth discrepancies from 99 to the "after" resolution discrepancy count of 54, an overall discrepancy rate of only 3.4 percent, which compares quite favorably with the original discrepancy rate of about 14 percent. An examination of Tables 5 and 6 indicate that it was possible to resolve substantial numbers of birth record discrepancies for virtually all categories of female respondents.

B. Evaluation of Fathers' Birth Records

As may be seen in Tables 4 through 6, the overall reporting discrepancy level and rate prior to adjustment is much larger for young fathers than young mothers. Indeed, almost half of all fathers had at least one discrepancy in their retrospective birth report. One important reason for this high discrepancy rate is the much higher proportion of fathers who were not living with their children, and thus perhaps less likely to be aware of specific birth dates. Also, a substantial number of young men report own children in 1982 but had not reported these same children at earlier survey dates. In most instances, these discrepancies cannot be resolved without additional probes in subsequent interviews. In some instances these "new" children may reflect a knowledge of births which they did not previously have, in some cases a delayed willingness to acknowledge paternity, and probably in some cases they may in fact not be their own children but the children of women whom they have recently married or formed a relationship with. The most common discrepancy is for men who acknowledge for the first time the existence of a child in 1982 even though they are not living with the child at that time. Indeed, one of every four fathers of those children who are not living with them acknowledge their child for the first time in 1982, even though the child had been born before the 1981 survey.

Although a significant portion of the sex differential in reporting discrepancy reflects the lesser likelihood of fathers to be living with their children, this rationale is not a sufficient explanation. As Table 5 demonstrates, men in almost every residence category or marital status are more likely than their female counterparts to have discrepant records. Indeed, it is of some importance to note that fathers living with their children (by far the single largest category) are much more likely to report discrepant birth dates than are mothers in the same category. Thus, aside from demographics, men are simply not as accurate in the reporting of their own birth histories.

In addition to the higher discrepancy rate of fathers, it was also possible to clarify only a smaller percentage of their discrepancies, because of the larger proportion who did not live with their children. For these family units, the household records frequently could not be used for clarifying ambiguities.

Overall, as may be seen in Table 4, 341 of the 728 male respondents who ever reported a live birth originally had at least one discrepant record. Following the same procedures detailed above for the mothers, the number of unresolved discrepancies was reduced to 201. Thus the discrepancy rate was reduced from 47 to 28 percent. Discrepancies were most effectively eliminated for men who were living with their children because then the household record information could be used most effectively.

C. Data Quality and Sample Bias

Table 7 summarizes the effects of the data discrepancy resolution analysis on the overall distribution of the male and female birth records. It may be noted that for both fathers and mothers the utility of the birth records for unbiased cross-tabular analyses is greatly improved by the discrepancy resolutions although significant problems still remain in the father's sample.

For the mothers' sample, almost 94 percent have their children with them in their own household in 1982. Before our internal data evaluation, only about 80 percent of mothers who reported a discrepancy in their birth record had their children living with them. After our data cleanup, 97 percent of the mothers who still had a discrepancy in their birth record were living with their children. From the perspective of household residence, there no longer is any difference between the quality of the birth records for women living or not living with their children.

Following our data cleanup, it may be seen that the mothers who still have inconsistencies in their birth records are more likely to be never married, Hispanic and black. However, the most relevant issue is that there are no significant differences between the household, marital or ethnic distribution of the full sample of mothers and the sample of mothers who have internally consistent birth records--about 97 percent of the full group. Thus, researchers can use the female birth records which are limited to the 97 percent which are internally consistent with full confidence that their

Table 7 Disitribution of Parents with Discrepant and Nondiscrepant Birth Reports Before and After Data Cleanup by Household Status of Children, Marital Status or Race

	Respondent is Father				Respondent is Mother				Total	
	Discrepancy in report		No discrepancy in report		Discrepancy in report		No discrepancy in report		Parent Sample	
	Before	After	Before	After	Before	After	Before	After	Father	Mother
Household status of children	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Child in household	42.4	28.7	64.9	70.3	79.8	70.4	95.1	94.4	60.1	93.6
With other parent only	52.0	61.0	21.7	29.5	3.2	0.0	0.7	1.1	37.2	1.0
Other	5.6	10.4	13.4	0.3	17.0	29.6	4.3	4.5	2.7	5.4
Marital Status in 1982	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Never married	48.5	58.9	13.4	18.6	34.1	42.6	30.6	30.7	29.8	31.1
Married spouse	39.1	28.7	69.6	65.6	48.5	40.7	52.1	52.0	55.4	51.6
Other	12.4	12.4	17.0	15.8	17.5	16.7	17.3	17.3	14.8	17.3
Race/Ethnicity	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hispanic	13.8	10.8	19.6	19.3	17.0	22.0	15.7	15.7	16.9	15.9
Black	51.8	56.2	19.1	25.9	38.0	40.7	33.9	34.3	34.3	34.5
White	34.4	33.0	61.3	54.9	45.0	37.0	50.4	50.0	48.8	49.6
Sample size	340	203	388	525	229	54	1352	1527	728	1581

NOTE: Distribution by household status excludes cases where there was an interview error or "no children" in household after discrepancy resolution. See Table 4 for a more comprehensive note of definitions of error types.

research will not be subject to sample selection biases due to characteristic differences between mothers who report accurately and mothers who misreport.

As already indicated, it was not possible to resolve inconsistencies in the male birth records to the same degree as for mothers. While the discrepancy rate was reduced substantially from 47 percent to 28 percent, the reduction was not sufficient to make the distribution of fathers nondiscrepant birth reports similar to the overall distribution of fathers whether gauged from the perspective of the percentage of children in the household, marital status, or race.

Overall, 60 percent of the fathers in the sample are living with their children. Before our data cleanup, 65 percent of fathers with "clean" birth records lived with their children compared with 42 percent for fathers with discrepancies in their birth records. Because we had greater success resolving discrepancies in the records of fathers who were living with their children, the distribution between discrepant and nondiscrepant reporting fathers according to household structure widened; after the data cleanup, 70 percent of the fathers with "clean" records lived with their children compared with 29 percent for the fathers who still had discrepant birth records. A parallel widening between the characteristics of the discrepant and nondiscrepant reporting father may be noted in the marital status and race/ethnic distributions.

In any event, after resolving all the birth record inconsistencies that could be resolved, we show in Table 7 that the household, marital status, and racial/ethnic distribution of the total sample of fathers remains substantially different from the distribution for the fathers who have "clean" birth records. Thus, researchers using the male data set will need to proceed more cautiously with their research. Unlike those using the female records, such researchers will not be able to limit their analyses to the "nondiscrepant" male sample with confidence that their results--at least their tabular results--are representative of a national sample of young fathers. Tabular analyses requiring national representation should be based on the full male sample, and individual researchers will need to proceed with caution in determining whether or not the specific internal inconsistencies in the fathers' birth records jeopardize the quality of their analyses or the substance of their results.

The data and constructed variables available will permit researchers to follow any of several options. First, the 1982 public use data tape, already available to the public, includes all the fertility-related variables for the men and women as they were received from the NORC. Thus, researchers who wish to work with the original data may do so.

The extract tape prepared at the Center for Human Resource Research includes revised versions of all fertility variables for which changes were made, based on the discrepancy analyses detailed above. Thus, the extract tape does not include all of the original fertility variables but only those variables where a change from the original record was indicated.

In addition, the extract tape includes a large number of created basic fertility variables which are commonly used in fertility research. These include but are not limited to a variable on number of children ever born as of 1982, spacing (between marriage and first birth, first and second birth), mother's or father's age at marriage, at first and second birth, and so on. We also created a few variables relating to marital status (month and year of first marriage, divorce, second marriage, age at the first marriage) to negate the need for researchers to scan across all survey years in order to repeatedly create these commonly-used variables.

The revised birth data were used in creating all these fertility variables. However, these variables are not limited to nondiscrepant birth records. They include information for all the parents in the survey and are based on the retrospective reports from the 1982 interview schedule as revised.

Finally, the extract tape also includes a variable which will permit researchers to include or exclude discrepant birth records and will identify the nature of the data problem for records with unresolved discrepancies. There are three codes on this variable permitting identification of (1) records which have no internal discrepancy (2) records with a unresolved dating discrepancy and (3) records with a unresolved discrepancy in the number of children ever born. This variable will permit researchers to limit their analyses to birth records which are internally consistent, if they choose to do so. It will enable them to perhaps exclude the more serious cases with unresolved parity. In any event, it will allow researchers to proceed with any methodological analyses of their own liking aimed at clarifying the magnitude and substance of these discrepancies.

D. External Data Quality Checks

In this section, the levels and patterning of live births, pregnancies not resulting in a live birth, and related fertility information for the female respondents is compared with other available data. To the maximum extent feasible, we have attempted to match our sample as closely as possible to the data sets we are comparing our data with--in terms of geographic comparability, racial definitions, age and seasonality. All of the birth comparisons use NLS rates and measures derived from the post-discrepancy analysis birth data. Pre-discrepancy resolution estimates are generally not included for comparative purposes because without exception, the female data cleanup did not affect any of the birth tabulations in a significant way. Given the relatively low error rate and the apparent tendency of discrepant reports to "net out," it can be unequivocally stated that none of the female period or cohort fertility measures examined changed more than trivially when we revised the data. This finding is of some importance in its own light.

(1) Comparison with CPS birth estimates.

Table 8 includes a precisely matched comparison of childlessness and period birth rates between unpublished data from the June 1981 Current Population Survey and the 1982 NLS. In order to maximize comparability, the NLS statistics, which are from the retrospective birth reports in the 1982 interview schedule, were temporally matched with the retrospective reports in the June 1981 CPS. That is, the NLS statistics in this table are for the 49-week period preceding the June 1981 CPS survey week which provides a reference period identical to that used in the CPS (which measures fertility between July 1, 1980 and the 1981 survey week). Also, identical racial definitions were used. Finally, statistics in this table are for number of women who had a birth during the period, not the total number of births in the period.

After making these comparability adjustments, we show in Table 8 that the overall fertility statistics for the two data sets are virtually identical. Within marital statuses, the percent childless for the two data sets are not significantly different from each other. The statistics on the percentage of women who have had a child in the past year virtually coincide with each other (although the never-married NLS women do have a slightly higher birth rate), and even the annual birth rates within the parity-specific categories are very close to each other.

An examination of the separate racial statistics suggests some differences which are usually modest but probably not random as there appear

Table 8 18-24 Year Olds Who have had a Child in the Past Year by Race and Marital Status: Comparison of June 1981 CPS with 1982 NLS: Young Women
(numbers in thousands)

	No. of women	Childless women		Women who have had a child in past year					
				All women		Women with 1 CEB		Women with 2+ CEB	
	Number	Number	Percent	Number	Per 1,000	Number	Per 1,000	Number	Per 1,000
Total race									
Total marital status									
CPS	14849	10350	69.7	1367	92.1	736	49.5	631	42.5
NLS	14453	10267	71.0	1315	91.0	742	51.3	574	39.7
Ever married									
CPS	5839	2437	41.7	1101	188.6	571	97.8	530	90.7
NLS	5381	2218	41.2	1002	186.2	538	100.0	464	86.2
Never married									
CPS	9010	7913	87.8	266	29.5	164	18.2	102	11.3
NLS	9074	8050	88.7	314	34.6	204	22.5	109	12.0
White									
Total marital status									
CPS	12400	9070	73.1	1082	87.2	608	49.1	473	38.2
NLS	11539	8674	75.2	919	79.6	564	48.9	355	30.7
Ever married									
CPS	5184	2282	44.0	953	183.9	514	99.1	439	84.7
NLS	4547	2009	44.2	793	174.4	463	101.8	330	72.5
Never married									
CPS	7216	6788	94.1	129	17.8	94	13.1	34	4.7
NLS	6994	6667	95.3	125	17.9	101	14.4	25	3.6
Black									
Total marital status									
CPS	2047	978	47.8	252	123.0	107	52.3	145	70.7
NLS	2054	1092	53.2	256	124.5	112	54.5	143	69.6
Ever married									
CPS	502	90	18.0	117	232.1	39	78.4	77	153.7
NLS	437	98	22.4	96	219.7	26	59.5	70	160.2
Never married									
CPS	1545	888	57.5	135	87.5	68	43.8	68	43.8
NLS	1616	994	61.5	160	100.9	87	53.8	73	45.2
Hispanic									
Total marital status									
CPS	1058	626	59.2	129	122.1	71	66.7	59	55.4
NLS	887	519	58.5	143	161.2	66	74.4	77	86.5
Ever married									
CPS	482	149	30.9	106	219.7	58	120.4	48	99.3
NLS	402	113	28.0	115	286.1	49	121.9	66	164.2
Never married									
CPS	576	478	83.0	23	40.4	13	21.8	11	18.6
NLS	485	406	83.8	28	57.7	17	35.1	11	22.5

NOTE: The NLS data are for a 49 week period preceding the survey week, comparable with the June 1981 CPS data which are for the period between the June 1981 CPS week and the preceding July 1. Statistics are for the number of women who had a birth during the period, not the total number of births in the period. The source for the CPS data are unpublished tabulations based on the 1981 CPS prepared by the U.S. Bureau of the Census.

to be systematic patterns of differences. For the white respondents, the NLS and CPS childlessness statistics are identical but the NLS married women have a slightly lower period birth rate. Black NLS respondents appear to be slightly more likely to be childless than their CPS counterparts. While the overall birth rate for black NLS and CPS respondents are virtually identical, this similarity masks a variation by marital status; NLS black married women had slightly lower birth rates than their CPS counterparts but the reverse was true for those who were never married. Given the identical NLS and CPS overall birth rates for the black women, this difference may well represent differences between NLS and CPS respondents in marital status reporting rather than fertility reporting. Indeed, the NLS respondents are somewhat more likely to report themselves as never married than the CPS respondents, which probably accounts for at least part of the discrepancy in birth reporting by marital status between the two data sets.

Whereas no significant differences appear in childlessness reporting between CPS and NLS Hispanic women, large differences appear in birth reporting. Overall, and within the marital status categories, NLS Hispanic women are much more likely to report a birth within the past year; whether this reflects more complete birth reporting in the NLS survey or differences in the nature of the CPS and NLS Hispanic samples warrants further investigation. It may be noted that the NLS Hispanic sample, when weighted up to population totals, still falls substantially short of the CPS Hispanic population of the same age for the same point in time.

Table 9 shifts from a period to a cohort perspective and compares relatively comparable groups of NLS and CPS mothers in terms of their lifetime fertility by the age at which they began childbearing. It may be seen that in almost all instances the lifetime fertility reported for the NLS and CPS

Table 9 Children Ever Born Per Mother by Age of Mother and age at First Birth

	Age of mother = 18-19		Age of mother = 20-24	
	1982 NLS	1980 CPS	1982 NLS	1980 CPS
Children ever born per mother by age at first birth				
14-17	1.34 (184)	1.35	1.95 (473)	1.97
18-19	1.01 (85)	1.01	1.54 (532)	1.55
20-21	- -		1.25 (445)	1.28
22-24	- -		1.05 (202)	1.12

NOTE: CPS statistics are from Table 18 of U.S. Bureau of the Census, Fertility of American Women: June 1980, Current Population Reports Series p-20 No. 375.

mothers is identical. Regardless of which age cohort one examines, after controlling for age at first birth, the NLS and CPS mothers have followed identical childbearing patterns so far. Thus, it is fair to conclude that the quality of the NLS birth information is essentially equivalent to that reported in the CPS (and vice versa).

As one final comparison with CPS, Table 10 contrasts cumulative first births per 1000 women between the NLS and 1980 Current Population Survey Statistics. These two sets of data do not represent identical cohorts or methodologies, so there is no reason to expect the reported birth levels to be identical. The NLS women are an appreciably younger group than the 1950-1954 CPS birth cohort and the methodology utilized in deriving the NLS single-year-of-age statistics used a quasi-cohort approach different from the CPS procedures. These differences in cohort and methodology could account for the generally lower NLS fertility estimates. The principal utility of the comparison made in this table is to note the essentially similar pattern of increase in cumulative fertility between the two data sets. Specifically, the ratio of NLS to CPS cumulative fertility is about the same at all ages except age 18, ranging between .90 and .93. Thus, the temporal patterning of cumulative fertility appears similar between the two data sets.

Finally, Tables 11 and 11A contrast the cumulative first birth fertility patterns for men before and after the birth record discrepancy exercise. Comparisons with other data sets are not possible because to our knowledge there are no analogous male statistics. It may be noted that the fertility history cleanup in some instances has substantially altered the fertility levels for these young men although generally there has been no major effect on the temporal patterning of the histories. This latter fact reflects the generally known phenomenon that cumulative patterns are less sensitive to

Table 10 First Births Per 1000 Women Cumulated to Successive Ages by Race: Comparison of 1980 CPS and 1982 NLS

	Total		White		Black		Hispanic
	NLS	CPS 1980	NLS	CPS 1980	NLS	CPS 1980	NLS
Percent with first birth by age							
18	95 (5578)	89	68 (3307)	68	221 (1416)	239	147 (870)
19	145 (4838)	153	108 (2902)	125	314 (1220)	354	231 (729)
20	211 (4090)	230	168 (2496)	199	401 (1021)	456	320 (584)
21	270 (3348)	300	219 (2074)	268	498 (813)	526	409 (470)
22	336 (2567)	364	290 (1626)	331	559 (595)	598	432 (354)
23	384 (1744)	421	335 (1111)	390	616 (393)	649	466 (243)
24	437 (954)	472	386 (611)	443	684 (206)	682	519 (139)

NOTE: NLS group is essentially a 1958-1964 birth cohort. The CPS comparison is for the 1950-1954 birth cohort as of 1980. The NLS statistics in this table essentially represent a modified cohort approach, that is, the percent with a first birth by age 18 and over. The percent with a first birth by age 19 is for the population 19 and over and so on. Given the constraints of the data sets, it was not possible to devise a theoretically more appropriate retrospective match. At least part of the discrepancy between the two sets of fertility statistics may reflect the different methodological approaches and the fact that the data are for somewhat different birth cohorts. All tables which include CPS comparisons use CPS race definitions. CPS estimates are from Table 20 of U.S. Bureau of the Census Fertility of American Women: June 1980, Current Population Reports Series P-20 No 375.

Table 11 First Births Per 1000 Men Cumulated to Successive Ages by Race: Post Discrepancy Results

	Total		White		Black		Hispanic	
Percent with first birth by age								
18	18	(5571)	9	(3314)	63	(1421)	35	(852)
19	40	(4809)	25	(2898)	118	(1218)	63	(705)
20	71	(4039)	53	(2449)	166	(1001)	101	(601)
21	111	(3298)	86	(2055)	241	(792)	158	(460)
22	158	(2515)	129	(1626)	313	(570)	229	(325)
23	207	(1727)	174	(1116)	382	(397)	275	(218)
24	262	(935)	225	(614)	442	(208)	386	(115)

See Note to Table 10.

Table 11A First Births Per 1000 Men Cumulated to Successive Ages: Pre-Discrepancy Results

	Total		White		Black		Hispanic	
Percent with first child by age								
18	17	(5572)	9	(3315)	58	(1421)	32	(852)
19	37	(4810)	24	(2899)	108	(1218)	62	(705)
20	68	(4040)	51	(2450)	156	(1001)	100	(600)
21	108	(3299)	85	(2056)	224	(792)	152	(460)
22	150	(2515)	123	(1626)	294	(570)	224	(325)
23	205	(1727)	172	(1116)	381	(397)	275	(218)
24	254	(935)	218	(614)	442	(208)	359	(115)

See Note to Table 10

dating errors as the impact of systematic changes in the age-specific rates tends to be diffuse and usually shows up as altering the level rather than shape of the fertility curve.

The adjustments made in the male birth records in this instance have resulted in generally higher cumulative first birth rates at the ages between 19 and 22. The changes in the white rates are modest, and the changes in the black rates are much more significant. This latter fact is not surprising--it reflects the fact that in an absolute sense, the changes made in the black male birth histories were the largest (reducing the discrepancy rate from 70 to 45 percent, as may be noted in Table 5). Given the substantial increase in the cumulative black male first birth rates for all ages below 23, it appears that the changes made in the black birth histories were not random in the sense that they tended to "net out" in their effects on fertility rates. It is not clear what the impact of further reducing the black discrepancy rate would be. However, these results suggest an important caveat for users of these male fertility records.

(2) External data checks on the quality of abortion and other fertility-related data reporting.

Because retrospective reports on pregnancies not terminating in a live birth were available for only one point in time it was not possible to carry out any internal checks on the quality of the abortion and miscarriage reporting. Thus, for the most part, our examination of the quality of events other than live birth is limited to comparisons with other data sets.

Table 12 compares the percentage of premaritally pregnant women age 15 to 19 whose first pregnancy ended in a live birth using comparable groups of women from the NLS in 1979 and the 1976 data reported by Zelnik, Kantner and Ford. In both cases, the data are limited to samples of metropolitan women in

Table 12 Percentage of Premaritally Pregnant Women 15-19 years of Age Whose First Pregnancy Ended in a Live Birth: Comparison of 1979 NLS with 1976 Zelnik-Kantner Data
(sample sizes in parentheses)

		NLS		Zelnik Kantner
Current age				
	15-16	76.8	(59)	54.0
	17	59.7	(77)	57.6
	18	85.3	(97)	68.8
	19	82.2	(123)	68.1
	15-19	77.4	(356)	64.8
Parent's education				
	Less than 9	85.7	(85)	81.3
	9-11	84.5	(100)	70.7
	12	75.8	(113)	55.7
	13 or more	48.3	(39)	32.4
Age at first conception				
	14 and under	68.3		80.5
	15	67.4		74.8
	16	85.1		67.9
	17 and over	88.7		51.8
Pregnancy intention				
	wanted	84.6	(101)	92.5
	not wanted	75.4	(247)	51.2
White		70.3	(141)	54.8

NOTE: NLS sample was matched as closely as possible to Zelnik/Kantner data for metropolitan teenagers as reported in Table 5.5 of Sex and Pregnancy in Adolescence by Melvin Zelnik, John F. Kantner and Kathleen Ford. Sage Publications, Beverly Hills, 1981.

order to maximize comparability.[1] Overall, about 65 percent of the Zelnik/Kantner premaritally-pregnant women had their pregnancy result in a live birth compared with about 77 percent for the NLS sample. Assuming comparable levels of reporting for live births, this difference implies a nonlive termination rate substantially more than 50 percent higher in the Zelnik than in the NLS data. It may be noted in Table 12 that the discrepancy between the two data sets is greater for white young women, for women whose parents have more education, who retrospectively reported that they did not want the pregnancy and who conceived at an older age. Indeed, the data in Table 12 indicate that for women conceiving at a young age--below 16--the NLS sample reports a higher level of pregnancies not ending in a live birth. Thus, the data are strongly consistent with the notion that the abortion nonreporting bias in the NLS is apparently most serious among young women from higher status backgrounds who are conceiving at older ages. Also, to the extent that the proportion of teenage pregnancies ending in an abortion may be increasing, (as suggested by Pratt and Bachrach in their summary paper on the 1982 National Survey of Family Growth[2]) the comparison of the 1976 Zelnik/Kantner and 1979 NLS statistics may understate actual differences in levels of abortions.

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[1] The comparison data are from Tables 5.5 of Sex and Pregnancy in Adolescence by Melvin Zelnik, John F. Kantner and Kathleen Ford, Sage Publications, Beverly Hills, 1981. Even after limiting the NLS sample to metropolitan women other differences keep the sample from being exactly comparable. For example, the Zelnik/Kantner sample excludes women living in dormitories.

[2] William F. Pratt and Christine A Bachrach, "Preliminary Estimates of the Population 'at Risk' of Pregnancy and of those using Contraception--Findings from Cycle III of the National Survey of Family Growth," presented at the 1983 Meetings of the American Public Health Association, Dallas, Texas, November, 1983.

Table 13 compares a variety of teenage pregnancy statistics from the NLS with, in this case, temporally comparable statistics from the 1979 Zelnik/Kantner study.[3] The NLS teenagers are much less likely to have reported a premarital pregnancy, which is consistent with the knowledge that they are significantly less likely to report an abortion. For those premaritally pregnant young women still unmarried at the time of the pregnancy resolution, 16 percent of the NLS sample reported that they had an induced abortion compared with about 37 percent for the Zelnik/Kantner sample. Significant differences in these statistics were reported for both black and white respondents.

Regarding marital resolution of the premarital pregnancy, prior "wantedness" of the pregnancy and prior contraceptive use among those not wanting the pregnancy, the differences between the studies are less pronounced. Indeed, the somewhat greater wantedness of a pregnancy reported by the NLS women and their lesser use of contraception are certainly consistent with the knowledge that the NLS women were under-reporting abortions--which were somewhat less wanted pregnancies but probably associated with slightly greater attempts at contraception. In general, it may be concluded on the basis of the above (and other data not presented here) that the NLS retrospective fertility reports greatly understate abortion reports but that other information on marriage resolution, prior contraceptive usage and prior pregnancy wantedness are probably of a quality equivalent to the information gathered in the Zelnik/Kantner studies.

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[3] All the 1979 Zelnik/Kantner statistics cited are from "Sexual Activity, Contraceptive Use and Pregnancy Among Metropolitan Area Teenagers: 1971-1979" in Family Planning Perspectives Vol. 12 Number 5, September/October 1980.

Table 13 A Comparison of Selected NLS and Zelnik-Kantner 1979 Teenage Pregnancy Statistics

		Total	White	Black	Hispanic
Percent ever pregnant before marriage (all 15-19 year-old women)	NLS	10.9	8.1	22.9	15.4
		(2509)	(1320)	(704)	(485)
	Z-K	16.2	13.5	30.0	
Marriage resolution status for all 15-19 year-old premaritally pregnant women					
Married before resolution	NLS	19.8	28.4	3.5	
	Z-K	15.5	20.3	4.3	
No Marriage before resolution	NLS	80.2	71.6	96.5	
	Z-K	84.5	79.7	95.7	
Married after resolution	NLS	7.9	9.5	3.5	
	Z-K	14.3	17.0	8.0	
Never married by 1979	NLS	72.4	62.2	93.0	
		Z-K	70.2	62.7	87.7
Pregnancy resolution status for premaritally pregnant unmarried at time of pregnancy resolution					
% with live birth	NLS	76.1	65.0	87.3	85.2
	Z-K	49.4	38.6	71.4	
% with miscarriage/still birth	NLS	7.5	8.5	5.8	9.4
	Z-K	14.0	16.4	9.0	
% with induced abortion	NLS	16.5	26.5	7.0	5.4
	Z-K	36.6	45.0	19.6	
Pregnancy intention for premaritally pregnant unmarried at time of resolution					
% wanted pregnancy	NLS	24.2	20.9	25.5	32.2
		(284)	(96)	(144)	(44)
	Z-K	18.0	16.4	20.9	

Table 13 Continued

		Total	White	Black	Hispanic
Contraceptive use among subset who did not want pregnancy					
% using contraception	NLS	26.3 (212)	19.9 (71)	34.4 (113)	11.4 (28)
	Z-K	31.5	22.0	36.1	

NOTE: All comparison statistics are from "Sexual Activity, Contraceptive Use and Pregnancy Among Metropolitan-Area Teenagers: 1971-1972," in Family Planning Perspectives Vol. 12, No. 5, September/October 1980.

A more precise fix on the magnitude of the abortion under-reporting can be obtained by comparing abortion to live birth ratios for 15 to 19 year olds in the NLS sample with comparable estimates for the National Center for Health Statistics thirteen-state reporting area.[4] The NCHS data are probably the highest quality available abortion reports. As may be seen in Table 14, the overall number of abortions per 1000 live births is substantially higher in the NCHS report than for the NLS. Limiting the NLS reports to young women living in the thirteen reporting states reduces the differences somewhat, but nonetheless they remain substantial. Overall, the data suggest that the NLS respondents are reporting about 40 percent of their abortions, about 50 percent for white and 33 percent for black young women.[5]

Table 15 provides additional detail on the patterning of pregnancy resolution by parity race and age at first conception for the full sample of young women. It may be seen (in Table 15) that the level of abortion reporting is lower for black than for white respondents, consistent with other available evidence. Hispanic abortion reporting is approximately at the same level as that for blacks. For all three racial groups, miscarriage reports substantially exceed abortion reports. Other evidence not presented here (but briefly discussed in a later section) suggest that there is no significant evidence of respondents reporting abortions as miscarriages. The characteristics of young women reporting miscarriages are very similar to those of women reporting live births; both differ from the characteristics of women reporting abortions.

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[4] The NCHS data are from Table A in NCHS Report Vol. 31 No. 5 Supplement, October 25, 1982 entitled Induced Termination of Pregnancy: Reporting States, 1979 by Drucilla Burnham.

[5] This estimate assumes that the NCHS reporting is complete, an assumption probably not warranted.

Table 14 Comparison of Abortion to Live Birth Ratios Between NLS 15-19 Year-Olds During 1979 with 15-19 Year-Olds as Reported by the National Center for Health Statistics in 1979

	Ratio of Abortions to Live Births Per 1000 Events								
	Total			White					
	NCHS	Total NLS	13 State NLS	NCHS	Total NLS	13 State NLS	NCHS	Total NLS	13 State NLS
15-19	726.1	168.1	319.1	809.3	220.1	410.7	559.7	69.2	189.2
15	963.4	111.1	a	1225.4	a	a	707.0	a	a
16	838.4	163.3	a	1028.1	a	a	575.8	a	a
17	732.5	197.5	a	851.1	a	a	514.5	a	a
18	792.5	80.0	a	898.2	a	a	564.8	a	a
19	599.2	251.7	a	623.6	a	a	538.2	a	a

[a] Insufficient sample sizes for data presentation. 13 state NLS statistics limited to the 13 reporting states in the NCHS sample. The NCHS statistics are from Table A in NCHS Report Vol 31 No. 7 Supplement, October 25, 1982 entitled Induced Termination of Pregnancy: Reporting States, 1979 by Drusilla Burnham.

Table 15 Distribution of Number of Pregnancies by Pregnancy Outcome: Young Women

(Numbers in thousands and sample sizes in parentheses)

	Number of women in category	Number of preg-nancies	Number of abortions	Number of still-births	Number of mis-carriages	Number currently pregnant	Number of live births	Potential live births[1]	Percent live births	Percent abor-tions	Percent miscarriages[2]
Number of pregnancies											
1	3159 (1350)	3159	410	10	177	447	2115	2712	78.0	15.1	6.9
2	1725 (747)	3447	253	9	419	322	2444	3125	78.2	8.1	13.7
3	666 (294)	2002	164	25	345	115	1353	1887	71.7	8.7	19.6
4	163 (87)	651	68	0	98	39	446	612	72.9	11.1	16.0
5	74 (38)	363	14	1	98	19	231	344	67.2	4.1	28.7
6	14 (8)	82	2	7	26	2	45	80			
7	3 (2)	21	2	0	4	0	15	21			
8	1 (1)	8	0	0	3	0	5	8			
Total events	5799 (2527)	9733	913	52	1171	944	6654	8789	75.7	10.4	13.9
All pregnancies											
White	4146 (1345)	6798	714	31	937	703	4413	6095	72.4	11.7	15.9
Black	1180 (769)	2079	136	15	160	163	1605	1916	83.8	7.1	9.1
Hispanic	474 (413)	867	57	5	83	83	639	784	81.3	7.3	11.4

[1] Excludes current pregnancies. [2] Includes stillbirths.

NOTE: No respondent has more than 8 pregnancies.

As may also be seen in Table 15, as the number of pregnancies which these young women have had increases, the probability that the pregnancy will result in a live birth decreases. This is not because of any change in abortion rates but rather a greater likelihood that the higher parity women will have had a miscarriage. The causality between such events is of course multidirectional; young women more prone to miscarriages may conceive more frequently partly because of a desire to have children and partly because they are fertile (not pregnant) for a larger proportion of the time. Also, a larger number of pregnancies at an early age implies narrower spacing with the mother possibly being less likely to have regained her strength before the next pregnancy. This may be associated with above average miscarriage probabilities.

The forthcoming 1984 NLS survey will include a special confidential self report section to be filled out by all respondents which will elicit information about any prior abortions. It is hoped that this confidential report will improve the data quality for this reporting event and also provide insight into related characteristics of respondents who did not report in 1982 on abortions which had actually taken place by then.

IV. SUMMARY OF FERTILITY-RELATED STATISTICS FROM THE 1982 NLS

This section presents a variety of data on live births and pregnancies, fertility expectations, sexual activity and contraception and retrospective reports on the "wantedness" of earlier pregnancies. These data will provide an overview of various dimensions of contemporary teenage and young adult sexual and fertility behavior. They will also clarify somewhat further the extent to which these NLS data may be comparable with other data sets. The textual comments are not meant to be comprehensive but rather to suggest in an abbreviated manner some analytically useful highlights or ways in which the NLS data are similar to or different from other fertility data sets.

A. Fertility Expectations

Tables 16 and 17 summarize birth expectations for the young men and women by age, marital status, race and, for the 22 to 24 year-olds in the sample, by educational attainment. In general, the female respondents in the NLS are less likely to report that they expect no children or one child and more likely to report that they expect four or more children than their CPS counterparts: this systematic pattern appears at all ages, marital statuses and races. Overall, 6.4 percent of the NLS 18 to 24 year-old women expect no children compared with about 11 percent for 18 to 24 year-olds as reported in the June 1981 Current Population Survey.[6] Seven percent of the CPS respondents had an incomplete response or no response on fertility expectations and an additional seven percent were "uncertain," whereas the NLS respondents in almost all instances (over 99 percent gave a numerical response) provided an answer to this question so it may be that at least part of the difference in expectation levels between the data sets may reflect these differences in reporting completeness in the expectation items.[7] It is of some importance to note that the discrepancy between the NLS and CPS statistics was greatest for the never married, a majority of the sample. This category had by far the greatest under-reporting in the CPS. Fully 16.5 percent of the 18-24 never-married CPS respondents were "uncertain" about their expectations and 18.4 percent had an incomplete or no response. Thus,

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[6] Tables 9 and 10 in U.S. Bureau of the Census, Fertility of American Women: June 1981 Current Population Reports Series P-20 No. 378 April 1983.

[7] Table A-1, *op. cit.*

Table 16 Percentage Distribution of Total Births Expected by Selected Characteristics: Young Women

(Weighted percentages)

	Total	0	1	2	3	4	5 or 6	7	sample size
Total sample	100.0	6.5	9.3	51.1	20.4	9.4	2.9	0.4	5931
17	100.0	7.4	8.9	48.7	18.4	11.0	5.5	0.1	451
18-24	100.0	6.4	9.3	51.5	20.5	9.3	2.6	0.5	5350
18-19	100.0	6.2	8.3	53.8	18.8	9.9	2.6	0.3	1455
20-21	100.0	7.7	8.8	50.7	20.5	8.7	2.9	0.6	1493
22-24	100.0	5.6	10.2	50.6	21.6	9.3	2.3	0.5	2402
25	100.7	7.5	11.7	42.3	26.6	7.2	4.8	0.0	130
Total sample									
Never married	100.0	8.6	8.5	49.7	19.9	10.0	3.0	0.4	3717
Married-spouse present	100.0	1.7	9.8	55.4	21.2	8.9	2.5	0.4	1784
Widow/div./sep.	100.0	6.7	15.5	44.4	22.4	6.0	4.3	0.7	430
Total sample									
Hispanic	100.0	5.3	8.2	46.6	21.7	12.6	4.8	0.8	937
White	100.0	6.7	8.3	52.4	20.8	8.9	2.6	0.4	3510
Black	100.0	5.6	15.5	45.4	17.9	10.7	4.0	0.9	1501
22-24 year olds									
0-11 years school	100.0	2.5	11.8	42.8	20.3	15.5	6.4	0.7	345
12 years	100.0	4.5	10.6	53.5	22.0	7.7	1.7	0.1	1138
13-15 years	100.0	6.3	8.8	50.6	21.4	9.1	2.6	1.1	614
16 years	100.0	9.4	10.4	46.0	23.4	10.0	0.2	0.7	258
17 or more yrs.	100.0	17.4	6.4	57.9	8.2	10.2	0.0	0.0	34

NOTE: CPS racial definitions used.

Table 17 Percentage Distribution of Total Births Expected by Selected Characteristics: Young Men

(Weighted percentages)

	Total	0	1	2	3	4	5 or 6	7 or more	Unweighted sample sizes
Total sample	100.0	7.5	6.4	52.7	20.8	9.2	2.7	0.7	6009
17	100.0	9.7	4.0	49.9	21.6	12.8	1.8	0.2	507
18-24	100.0	7.2	6.5	52.9	20.9	8.9	2.9	0.7	5348
18-19	100.0	7.5	5.7	50.5	21.5	10.6	3.3	0.8	1510
20-21	100.0	7.1	6.2	53.6	20.9	8.7	2.6	0.9	1512
22-24	100.0	7.1	7.3	54.0	20.5	7.9	2.7	0.5	2326
25	100.0	7.4	9.6	57.7	16.3	5.7	2.6	0.7	154
Total sample									
Never married	100.0	8.6	5.6	52.0	20.8	9.5	2.9	0.7	4688
Married, spouse present	100.0	2.7	8.8	57.9	20.5	7.5	1.9	0.6	1136
Widowed/separated/divorced	100.0	5.2	15.1	41.5	23.7	9.5	4.2	0.7	185
Total sample									
Hispanic	100.0	4.8	5.2	43.7	26.9	13.9	4.4	1.2	922
White	100.0	7.8	6.2	55.2	20.0	8.1	2.3	0.3	3576
Black	100.0	6.7	7.8	42.2	22.7	13.7	4.6	2.2	1528
22-24 year olds									
0-11 years school	100.0	6.0	11.4	52.2	17.8	9.7	2.1	0.7	390
12 years	100.0	7.1	9.3	52.2	20.2	7.9	3.0	0.3	1179
13-15 years	100.0	8.0	3.3	57.7	21.3	5.9	3.1	0.7	487
16 years	100.0	6.7	4.0	57.7	20.4	8.1	2.6	0.5	214
17 years or more	100.0	8.6	3.1	45.4	28.4	14.0	0.5	0.0	46

NOTE: CPS racial definitions used.

about one third of the CPS never-married sample age 18-24 did not respond completely to the expectation item.

Table 17 presents the same fertility expectations data for the young men. It may be seen that they have expectations essentially similar to the young women. The only difference of note is that better educated 22 to 24 year-old women are more likely to expect to be childless than their male counterparts, whereas less educated women expect larger families than less educated young men.

Tables 18 and 19 present comparable data on additional children expected, taking into account children ever born. The interested reader may compare the female expectations data in Table 18 with comparable statistics from the CPS. These may be found in Table 7 of the 1981 CPS fertility report cited above.

B. Period and Cohort Fertility

Tables 20 and 21 present current (period) fertility measures for the young women and men. These data are for a 52-week period (compared with the 49-week estimates presented in Table 8 for comparing NLS and CPS period estimates). Significant differences in childlessness and period fertility between men and women and between the races may be noted. The reported racial differences are much larger among the women than the men perhaps reflecting a greater likelihood of under-reporting for minority men compared with minority women.

It is also useful to note that even though no major differences in fertility expectations were reported between black and white respondents, the pace of current childbearing is obviously much more rapid for the black respondents. They are less likely to be childless and more likely than their white counterparts to have had a child during the past year. Either they are

Table 18 Number of Children Ever Born by Number of Additional Births Expected by Marital Status: Young Women

			Number of additional births expected				
Number ever born	Total		0	1	2	3	4 or more
			Total sample				
Percent distribution	100.0	(5932)	16.1	16.8	42.8	15.1	9.2
0	100.0	(3911)	9.0	8.2	52.6	18.4	11.9
1	100.0	(1266)	19.1	48.9	22.0	7.8	2.1
2	100.0	(558)	57.4	23.9	11.1	4.9	2.8
3	100.0	(149)	76.0	19.2	-	-	-
4 or more	100.0	(48)	82.8	11.3	-	-	-
			Ever married				
Percent distribution	100.0		24.0	27.3	35.1	9.2	4.4
0	100.0		6.3	10.4	61.5	14.0	7.7
1	100.0		18.3	50.0	22.7	7.0	1.9
2	100.0		58.3	23.7	10.3	4.8	2.8
3	100.0		77.8	17.1	-	-	-
4 or more	100.0		82.5	10.0	-	-	-
			Never married				
Percent distribution	100.0		11.8	11.1	47.0	18.3	11.8
0	100.0		9.6	7.7	50.4	19.4	12.9
1	100.0		21.2	46.0	20.3	10.1	2.4
2	100.0		52.6	24.6	14.9	5.4	2.4
3	100.0		69.0	27.4	-	-	-
4 or more	100.0		84.0	16.0	-	-	-

NOTE: Sample sizes in parentheses.

Table 19 Number of Children Ever Born by Number of Additional Births Expected by Marital Status: Young Men

Number ever born	Total		Number of additional births expected 0	1	2	3	4 or more
			Total sample				
Percent distribution	100.0	(6012)	11.5	10.0	49.3	18.2	11.1
0	100.0	(4944)	8.7	5.6	53.8	19.9	12.0
1	100.0	(741)	15.9	44.5	25.3	8.7	5.6
2	100.0	(257)	62.1	21.2	9.8	3.1	3.8
3	100.0	(54)	76.7	18.0	1.5	1.9	1.9
4 or more	100.0	(16)	68.5	-	-	-	-
			Ever married				
Percent distribution	100.0		19.6	24.6	39.2	11.1	5.6
0	100.0		6.3	7.7	61.4	16.5	8.2
1	100.0		16.2	49.8	23.3	7.7	3.0
2	100.0		65.3	20.6	8.5	2.4	3.1
3	100.0		79.0	14.6	-	-	-
4 or more	100.0		80.0	-	-	-	-
			Never married				
Percent distribution	100.0		9.5	6.4	51.8	19.9	12.5
0	100.0		9.0	5.3	52.9	20.4	12.5
1	100.0		15.1	31.4	30.4	11.1	12.0
2	100.0		44.6	24.5	16.7	6.9	7.2
3	100.0		65.6	34.4	-	-	-
4 or more	100.0		50.0	-	-	-	-

NOTE: Sample sizes in parentheses.

Table 20 18-24 Year Olds Who Have Had a Child in the Past Year (52 week period) by Race and Marital Status: 1982 NLS: Young Women (Thousands)

	No.of women	Childless women		Women who have had a child in past year					
				All women		Women with 1 CEB		Women with 2+ CEB	
	Number	Number	Percent	Number	Per 1,000	Number	Per 1,000	Number	Per 1,000
Total race									
Total marital status	14453	10267	71.0	1391	96.2	786	54.4	604	41.8
Ever married	5381	2218	41.2	1062	197.4	575	106.9	487	90.5
Never married	9074	8050	88.7	329	36.3	211	23.2	117	12.9
White									
Total marital status	11539	8674	75.2	977	84.7	602	52.2	375	32.5
Ever married	4547	2009	44.2	847	186.3	497	109.3	350	77.0
Never married	6994	6667	95.3	130	18.6	106	15.2	25	3.6
Black									
Total marital status	2054	1092	53.2	267	130.0	116	56.5	151	73.5
Ever married	437	98	22.4	97	222.0	27	61.8	70	160.2
Never married	1616	994	61.5	170	105.2	89	55.1	81	50.1
Hispanic									
Total marital status	887	519	58.5	147	165.7	68	76.7	80	90.2
Ever married	402	113	28.0	120	298.5	51	126.9	68	169.2
Never married	485	406	83.8	28	57.7	17	35.1	11	22.7

NOTE: The NLS data are for a 52 week period preceding the survey week. Statistics are for the number of women who had a birth during the period, not the total number of births in the period.

Table 21 18-24 Year Olds Who Have Had a Child in the Past Year (52 week period) by Race and Marital Status: 1982 NLS: Young Men
(Thousands)

	No.of men	Childless men		Men who have had a child in past year					
				All men		Men with 1 CEB		Men with 2+ CEB	
	Number	Number	Percent	Number	Per 1,000	Number	Per 1,000	Number	Per 1,000
Total race									
Total marital status	13906	11915	85.7	785	56.4	548	37.4	237	17.0
Ever married	2843	1377	48.4	609	214.2	417	146.7	192	67.5
Never married	11065	10539	95.3	176	15.9	131	11.8	45	4.1
White									
Total marital status	11227	9850	87.7	572	50.9	426	37.9	146	13.1
Ever married	2457	1256	51.1	507	206.3	369	150.2	138	56.2
Never married	8771	8595	98.0	65	7.4	57	6.5	8	0.9
Black									
Total marital status	1833	1396	76.2	145	79.1	74	40.4	71	38.7
Ever married	175	52	29.7	46	262.9	11	62.9	35	200.0
Never married	1658	1344	81.1	99	59.7	63	38.0	36	21.7
Hispanic									
Total marital status	872	691	79.5	69	81.2	49	58.4	20	22.9
Ever married	213	70	33.0	57	267.6	37	173.7	19	89.2
Never married	659	621	94.1	12	18.2	11	16.7	1	1.5

NOTE: The NLS data are for a 52 week period preceding the survey week. Statistics are for the number of men who had a birth during the period, not the total number of births in the period.

relatively further along in their childbearing or else they are more likely to be understating their likely lifetime fertility.

Tables 22 through 24 present in somewhat greater detail the tempo of the early childbearing and relates this early fertility to marital behavior. It should be emphasized that in these tables, as in all subsequent parity-specific tabulations, we are viewing the fertility behavior of young men and women whose pace of childbearing is above average compared to that which will ultimately be evidenced by their whole cohort. Thus, these tabular results typify the pace and patterning of childbearing for young men and women who are beginning childbearing at relatively young ages. The later childbearers within this cohort in all likelihood will space their children somewhat differently, show different associations between marriage and childbearing, follow different contracepting patterns and, (as will be shown) be more likely to want the pregnancies and births they do conceive.

As may be seen in Tables 22 and 23, young mothers and fathers are about equally likely to legitimize their first birth. Overall, about three quarters of the young men and women who have had a first birth have married by the 1982 survey date (although the marriage is not necessarily to the other parent of the child) and slightly over 60 percent were already married when their first child was born. The post-marriage pattern of first birth occurrences is also generally similar for the two sexes although there is modest support for the notion that fathers have their first child sooner after marriage.

The close similarity between the male and female results is encouraging from a data quality perspective although there is no reason to expect identical patterns. On the average, the young men probably father the children of women who are slightly younger than the average age of the women in this sample.

Table 22 Duration (Months) Between Marriage and First Birth by Current Parity and Race: Young Women

	Total	1 parity	2 or higher parity	Hispanic	White	Black
Percent never married (as of 1982 survey)	24.3	28.1	17.8	22.5	11.5	63.9
Child born before marriage	12.0	7.3	20.2	11.9	10.9	15.3
Percent of births occuring after marriage	63.7	64.6	62.0	65.6	77.6	20.8
Post-marital births	100.0	100.0	100.0	100.0	100.0	100.0
Within 6 months	30.6	28.3	36.5	25.2	30.7	44.6
Within 9 months	44.3	39.7	52.9	43.7	43.6	53.8
Within 12 months	55.8	51.0	64.8	59.9	54.6	65.1
Within 24 months	82.6	77.6	92.1	88.2	81.3	90.8
Population in thousands	4518	2868	1650	397	3098	1030
Sample size	2038	1277	761	344	1031	668

NOTE: CPS racial definitions used. Sample is limited to respondents who have had a first birth.

Table 23 Duration (Months) Between Marriage and First Birth by Current Parity and Race: Young Men

	Total	1 parity	2 or higher parity	Hispanic	White	Black
Percent never married (as of 1982 survey)	25.5	28.8	16.8	20.9	12.4	65.4
Child born before marriage	12.4	8.6	22.2	10.6	10.6	18.3
Percent of births occurring after marriage	62.1	62.6	61.0	68.5	77.0	16.3
Post-marital births	100.0	100.0	100.0	100.0	100.0	100.0
Within 6 months	35.7	32.0	45.7	33.1	35.8	48.3
Within 9 months	48.9	46.4	55.3	56.0	47.2	61.9
Within 12 months	59.1	57.2	64.4	70.6	57.1	68.7
Within 24 months	84.7	82.8	89.6	86.4	83.8	95.2
Weighted population (thousands)	2332	1688	644	206	1583	547
Sample size	1080	747	333	183	536	365

NOTE: CPS racial definitions used. Sample is limited to respondents who have had a first birth.

Table 24 Duration (Months) Between Marriage and First Birth by Educational Attainment of Respondent's Mother

	Male			Female		
Mother's education	Less than 12 years	12 years	13 years or more	Less than 12 years	12 years	13 years or more
Percent never married (as of 1982 survey)	29.4	23.0	16.3	28.1	19.6	15.1
Child born before marriage	12.6	10.7	12.5	13.2	10.6	11.2
Percent of births occurring after marriage	58.0	66.3	71.2	58.7	69.8	73.7
Post-marital births	100.0	100.0	100.0	100.0	100.0	100.0
Within 6 months	26.5	43.6	33.6	33.2	29.1	35.7
Within 9 months	42.2	55.3	41.5	47.2	42.0	44.6
Within 12 months	56.6	63.2	53.3	59.8	53.1	47.6
Within 24 months	84.0	86.2	80.6	82.4	82.1	82.9
Population in thousands	973	922	215	2153	1665	346
Sample size	513	366	97	1090	649	138

NOTE: Sample is limited to respondents who have had a first birth.

It is of some interest to note the enormous racial differentials in the propensity to legitimize the first child--a result generally consistent with other data. Whereas the vast majority of white and Hispanic young men and women legitimize their child, about 65 percent of the black young fathers and mothers are still not married as of the 1982 survey date.

Table 24 briefly summarizes the distinctive differences in first birth patterning by the respondent's social class, in this instance the respondents' mothers' education. For both fathers and mothers, there is a strong inverse association between legitimization and mother's education. Also, respondents of better-educated mothers were more likely to have their first birth occur after marriage. For those who do bear their first child after marriage, no systematic differences appear in the pace of childbearing. By two years after marriage there are no significant differences between young men or women from different educational origins in the pace of childbearing. Please note that an important caveat here and with respect to the two preceding tables is that they are limited to respondents who are known to have had a first birth by 1982.

Tables 25 through 27 summarize some dimensions of the likelihood of having a second birth and the patterning of this parity progression. The earlier noted caveat regarding the pace of early childbearing and the general lack of representativeness of these early childbearing mothers and fathers is undoubtedly even more cogent for this two parity subset. Table 25 summarizes cumulative second birth probabilities for young one-parity women. Generally, the black and Hispanic one-parity women accumulate second births at a more rapid rate than their white counterparts, but the relative gap between the races has diminished considerably by age 25. These data suggest that the earlier noted racial discrepancy between actual and expected fertility may

Table 25 Second Births Per 1000 One Parity Women Cumulated to Successive Ages by Race (One parity sample sizes in parentheses)

	Total		White		Black		Hispanic	
18 and over	128	(678)	92	(269)	169	(292)	204	(117)
19 and over	172	(877)	129	(365)	236	(359)	232	(153)
20 and over	214	(1039)	168	(480)	298	(388)	293	(171)
21 and over	284	(1082)	251	(520)	346	(382)	339	(180)
22 and over	372	(982)	340	(521)	418	(319)	508	(142)
23 and over	450	(752)	430	(407)	481	(235)	541	(110)
24 and over	481	(446)	472	(242)	500	(134)	506	(70)

NOTE: See Table 10 for note on how estimates were derived.

Table 26 Spacing (Months) Between First and Second Birth by Current Parity: Young Women
(Cumulative Percent)

	Total	2 parity women	3 parity or higher
12 months or less	6.8	4.5	14.2
18 months or less	25.8	23.8	32.4
24 months or less	44.4	41.1	55.0
30 months or less	59.0	56.0	68.6
36 months or less	73.5	70.3	83.7
48 months or less	88.0	85.5	96.1
Sample size	761	563	198

NOTE: Limited to respondents who have had a second birth.

Table 27 Spacing (Months) Between First and Second Birth by Current Parity: Young Men

(Cumulative Percent)

	Total	2 parity men	3 parity or higher
12 months or less	12.6	11.1	18.1
18 months or less	36.4	34.2	44.6
24 months or less	56.0	53.5	65.5
30 months or less	69.6	66.8	80.4
36 months or less	80.8	80.3	82.8
48 months or less	90.4	89.8	92.5
Sample size	333	263	70

NOTE: Limited to respondents who have had a second birth.

indeed at least partly reflect variation in the timing of fertility between the races.

Tables 26 and 27 summarize the timing of these progressions of those who do go on to have a second birth. Given the youthfulness of the sample, it is not surprising to note that the pace is rapid. For the women, 44 percent have had a second birth within two years of the first birth and almost 90 percent within four years. The fathers follow a generally similar pattern although their pace is somewhat more rapid. For those who have gone on already to have a third child, the temporal progression to the second birth was even faster. While no useful comparable statistics for a recent period are readily available from other data sets, it is worth noting that this pace of second childbearing far exceeds that reported for any year of birth cohorts "permitted" to progress under more representative biological circumstances. For example, 1975 CPS data for second births which occurred between 1970 and 1974 indicate that 32 percent of the second births occurred within 24 months of the first birth and 78 percent by four years.[8] For second births occurring during the heyday of the baby boom, 1960 to 1964, 49 percent occurred within two years and 83 percent within four years. The CPS data were limited to second births to married women. Data from subsequent NLS survey rounds will be of considerable value for examining the socioeconomic and health consequences of these compressed NLS spacing patterns.

C. Association Between Age at First Conception or Birth, Marital Status and Pregnancy Termination Status

In this section, the patterning of marriage and live births in relation to a young woman's age at first conception is summarized. The complete data relating to age at conception in this section and retrospective reports on wantedness of pregnancy and contraception preceding pregnancy in the following section are available only for the female respondents. Also, it is important to re-emphasize that the information about non-live pregnancy terminations reported here is known to be suspect. The levels of under-reporting on abortion and potential biases resulting from this under-reporting have been detailed earlier. These results are nonetheless reported here for two reasons: first, they provide the reader with additional information regarding the nature and magnitude of any potential bias. Second, the associations between early pregnancy, abortion, pregnancy and birth wantedness and prior reported contraception are of considerable substantive interest.

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[8] See Table 46 in U.S. Bureau of the Census, Trends in Child Spacing, June 1975, Current Population Reports, Series P-20, No. 315, February 1978.

Tables 28 and 29 highlight the powerful association between age at first conception and the probability of either immediately or ever (by 1982) legitimizing the union. Regardless of race, only a small minority of first births conceived before age 17, and a somewhat larger minority of births conceived between the ages of 17 and 19 were conceived after a marriage. For all live births which were conceived before age 17 (and there is no reason to believe that the statistics relating to live birth outcomes are distorted in any major way), only 10 percent were conceived within a marriage. This percent rises to 33 percent for conception between the ages of 17 and 19 and 70 percent for conceptions at age 20 and above.

However, even for those conceiving a first birth at the youngest ages, a large majority of the whites and Hispanics are married by the 1982 survey date. Whether or not they are married to the father of the child cannot be precisely determined.

Tables 30 and 31 provide further evidence on the patterning of reported abortions, miscarriages and live births in relation to the reported age at

Table 28 Age at First Conception by Marital Transition Probabilities and Race: All First Conceptions

	Total conceptions	Conceived after marriage	Conceived before marriage	No marriage by 1982 survey	Sample size
Total race					
Conceived before age 17	100.0	9.0	47.6	43.4	731
Conceived between ages 17 and 19	100.0	32.8	40.1	27.1	1053
Conceived after age 20	100.0	61.9	15.7	22.5	537
White					
Conceived before age 17	100.0	11.2	59.4	29.4	313
Conceived between ages 17 and 19	100.0	37.8	42.8	19.4	567
Conceived after age 20	100.0	68.2	15.1	16.6	352
Hispanic					
Conceived before age 17	100.0	19.2	49.6	31.2	117
Conceived between ages 17 and 19	100.0	41.2	36.2	22.6	183
Conceived after age 20	100.0	56.6	22.1	21.3	74
Black					
Conceived before age 17	100.0	2.0	25.0	73.1	303
Conceived between ages 17 and 19	100.0	9.4	30.8	59.8	305
Conceived after age 20	100.0	23.7	15.3	61.0	113

Table 29 Age at First Conception by Marital Transition Probabilities and Race: Live Births Only

	Total live births	Conceived after marriage	Conceived before marriage	No marriage by 1982	Sample size
Total race					
Conceived before age 17	100.0	10.2	49.6	40.1	614
Conceived between ages 17 and 19	100.0	33.4	43.3	23.3	836
Conceived after age 20	100.0	70.0	17.4	12.6	383
White					
Conceived before age 17	100.0	13.4	65.0	21.5	244
Conceived between ages 17 and 19	100.0	39.3	48.1	12.6	426
Conceived after age 20	100.0	78.3	16.8	4.8	241
Hispanic					
Conceived before age 17	100.0	21.4	51.9	26.7	98
Conceived between ages 17 and 19	100.0	42.7	36.0	21.4	152
Conceived after age 20	100.0	60.7	18.4	20.9	59
Black					
Conceived before age 17	100.0	2.2	24.9	73.0	274
Conceived between ages 17 and 19	100.0	9.0	29.6	61.4	259
Conceived after age 20	100.0	26.4	19.5	54.0	85

Table 30 Distribution of First Pregnancy Outcomes by Age at First Conception and Race

(Sample sizes in parentheses)

	Total pregnancies		Live births	Miscarriages	Abortions
Total race	1000	(2321)	76.9	12.3	10.9
Under 17	100.0	(731)	81.3	7.0	11.6
17-19	100.0	(1053)	78.2	12.7	9.1
20 and over	100.0	(537)	68.7	17.6	13.7
White	100.0	(1232)	73.2	13.6	13.3
Under 17	100.0	(313)	76.1	7.3	16.5
17-19	100.0	(567)	75.4	13.9	10.7
20 and over	100.0	(352)	66.7	18.6	14.6
Black	100.0	(721)	86.7	8.3	5.1
Under 17	100.0	(303)	90.9	5.8	3.5
17-19	100.0	(305)	86.9	8.3	4.8
20 and over	100.0	(113)	73.8	15.9	10.4
Hispanic	100.0	(374)	84.1	10.3	5.6
Under 17	100.0	(117)	83.5	9.4	7.2
17-19	100.0	(183)	84.7	11.8	3.4
20 and over	100.0	(74)	83.7	8.1	8.1

Table 31 First Pregnancy Outcomes by Age at First Conception, Marital Transition Pattern and Race

	Probability of abortion				Probability of live birth			
	Total	Conceived before age 17	Conceived 17-19	Conceived above age 20	Total	Conceived before age 17	Conceived 17-19	Conceived above age 20
Total race	.109 (2321)	.116 (731)	.091 (1053)	.137 (537)	.769	.813	.782	.687
Never married by 1982	.249 (818)	.178 (343)	.222 (338)	.472 (137)	.655	.753	.673	.387
Not married at conception	.076 (845)	.079 (325)	.064 (418)	.123 (102)	.837	.848	.845	.762
Married at conception	.017 (658)	.013 (63)	.015 (297)	.019 (298)	.797	.924	.796	.777
White	.132 (1232)	.166 (313)	.108 (567)	.147 (352)	.732	.761	.754	.667
Never married by 1982	.442 (271)	.366 (89)	.381 (116)	.685 (66)	.448	.558	.489	.194
Not married at conception	.083 (516)	.095 (191)	.065 (260)	.133 (65)	.830	.833	.847	.742
Married at conception	.017 (445)(	.012 (33)	.016 (191)	.019 (221)	.785	.915	.784	.766
Hispanic	.056 (374)	.074 (117)	.035 (183)	.078 (74)	.841	.833	.848	.838
Never married by 1982	.090 (94)	.131 (36)	.063 (45)	- (13)	.768	.712	.801	.821
Not married at conception	.074 (138)	.059 (57)	.056 (63)	- (18)	.838	.871	.843	.697
Married at conception	.016 (142)	.022 (24)	.000 (75)	.040 (43)	.892	.930	.877	.899
Black	.051 (721)	.035 (303)	.049 (305)	.105 (113)	.865	.907	.868	.736
Never married by 1982	.061 (457)	.042 (219)	.044 (178)	.171 (60)	.865	.906	.891	.652
Not married at conception	.037 (193)	.017 (78)	.060 (96)	- (19)	.873	.903	.836	-
Married at conception	.019 (71)	- (6)	.040 (31)	.000 (34)	.843	-	.828	.821

NOTE: Sample size in parentheses.

conception. It may be noted in Table 30 for both black and white young women that the percentage of first pregnancies reported as resulting in a live birth is substantially higher and the percentage resulting in a miscarriage substantially lower for conceptions occurring at younger ages. This miscarriage report appears to be inconsistent with what we would expect, given the greater likelihood of physiological problems being associated with very early pregnancies.

Similarly, Table 31 clarifies the nature of the associations between early conception and associated pregnancy and marital resolutions. Reported first pregnancy abortion probabilities are not sensitive to age at conception _per se_, but they are closely related to the patterning of the marital resolution. For example, _within_ age-at-conception categories, women who have not married by 1982 are much more likely to have aborted their first conceptions, and women who were already married at the conception date were, not surprisingly, much less likely to report the pregnancy as aborted.

Within marital resolution categories, particularly for women not married by 1982, however, there is a strong association between age of conception and the likelihood of having an abortion. In this regard, the pattern parallels those reported for premaritally-pregnant women in the Zelnik-Kantner analyses. For the ever-pregnant respondents never married as of 1982, 47 percent of those who conceived their first pregnancy after age 20 reported an abortion compared with 18 percent for conceptions prior to age 17. This differential probably reflects a mixture of reality and mis-reporting. Older never-married women may well be more likely to have an abortion. However, conceptions at older ages are also more likely to have occurred recently and thus abortions associated with these pregnancies may be more likely to be easily recalled. Finally, abortions at older ages may generally be viewed as more socially acceptable, particularly to the respondent's parents, and thus a respondent may be more willing to admit to the event.

The final table in this section reports on the tendency of young women to have repeated abortions or miscarriages. As may be noted in Table 32, the vast majority of young women who have reported on abortions or miscarriages have to date reported only one such event. Only 16 percent of women reporting an abortion have reported having more than one. Twenty-nine percent of all repeated abortions were second or third abortions to a woman. In comparison, 1979 NCHS abortion statistics for 18 to 24 year-old women indicate that 31 percent of abortions in that year were second or higher order abortions.[9] Although the data sets are not entirely comparable, the statistics are sufficiently similar to suggest that the NLS abortion under-reporting is not particularly selective of women having either their first or subsequent abortions.

D. Retrospective Reporting on Pregnancy Wantedness Status and Contraception in Relation to Pregnancy Termination Status and Age at First Conception

The results presented in this section rely heavily on retrospective reports on contraceptive use prior to earlier pregnancies and whether or not the respondent retrospectively recalls whether or not that pregnancy was wanted at that time. As such these data can certainly be subject to errors due to faulty recollection, rationalization after the fact, or in some instances, conscious misreporting of reality.

Regarding the retrospective reporting of contraceptive usage, given the temporal imprecision of the question wording ("before you became pregnant .... did you ever use any methods to keep from getting pregnant?") it is not

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[9] See Table 6 in NCHS *op. cit*.

Table 32 Distribution of Abortions and Miscarriages by Frequency of Event: Young Women

(Numbers in thousands)

	Number of miscarriages			Total miscarriages	Percent with multiple miscarriages
	1	2	3		
Total	761	124	55	1174	19.0
White	586	92	53	929	19.8
Black	127	15	1	160	11.2
Hispanic	48	16	1	83	26.2

	Number of abortions			Total abortions	Percent with multiple abortions
	1	2	3		
Total	643	99	23	910	15.9
White	524	65	20	714	14.0
Black	82	27	0	136	24.8
Hispanic	37	7	2	57	19.6

unlikely that there may be some over-reporting of contraceptive usage if the interest of the reader is in knowing whether or not the respondent was in reality contracepting in the period immediately preceding the pregnancy.

With respect to the retrospective report on wantedness, it is generally (but impressionistically) believed that after-the-fact reports on the wantedness of live births would tend to overstate wantedness, reflecting an unwillingness by women to acknowledge that they did not want a child which now exists. Thus, if there is a reporting bias for the wantedness item, it probably is towards an after-the-fact overstatement rather than understatement.

Table 33 provides a summary of the retrospective reports on contraception and wantedness for all first and second live births and pregnancies. Ever use of contraception preceding a pregnancy is much more prevalent preceding a second than first pregnancy. However, about equal percentages of women indicated that they had stopped using all methods of contraception prior to their first and second pregnancy.

Somewhat disconcertingly, less than 40 percent of all the young women stopped contracepting or were not using contraception prior to a first pregnancy because they wanted to become pregnant. Thus, a minority of the respondents (and also a minority of their partners) wanted the first pregnancy to occur when it did. In contrast, much larger percentages wanted their second pregnancy or birth.

Generally, white women were more likely to have ever used contraception preceding a pregnancy (although this racial differential narrows greatly by the second pregnancy). For Hispanic women, less contraceptive use was associated with the fact that they were more likely to have wanted their pregnancy. Black women, in contrast, were much less likely to have wanted

Table 33 Contraceptive Usage and Pregnancy Wantedness Prior to a First or Second Pregnancy or Birth (Percent Responding Yes to Question): Young Women

	Ever used method prior to (between) pregnancies				Had you stopped all methods prior to pregnancy[1]				Did you stop (or not use) because you wanted to become pregnant				Did your partner want you to become pregnant			
	1st preg.	1st birth	2nd preg.	2nd birth	1st preg.	1st birth	2nd preg.	2nd birth	1st preg.	1st birth	2nd preg.	2nd birth	1st preg.	1st birth	2nd preg.	2nd birth
Total race	47.5	45.5	66.7	67.9	68.2	72.8	69.3	73.3	38.6	41.6	61.3	59.4	47.1	48.5	57.9	56.6
White	51.0	48.7	68.6	70.5	68.7	73.5	70.5	75.8	40.0	43.6	64.1	62.9	47.1	49.2	58.6	58.2
Black	33.7	35.6	58.6	60.0	64.0	65.9	60.1	60.7	26.1	27.5	45.6	42.8	42.4	41.5	49.9	46.6
Hispanic	34.8	31.4	62.3	60.3	76.1	76.6	72.8	72.4	49.2	51.1	61.8	59.9	56.1	56.9	64.9	62.3

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[1] Responses limited to those who had ever used methods.

both their first and second pregnancy even though they were generally less likely to be contracepting.

Table 34 shows how reported pregnancy wantedness is sensitive to the age at which the conception occurred. Conceptions occurring at older ages are much more likely to be reported after the fact as wanted. This is true for women of all races. It is of some importance to note that the overall wantedness statistics for pregnancies resulting in a live birth are generally similar to those for pregnancies which resulted in a miscarriage, suggesting that most miscarriages probably were accurately reported as such and were not in reality abortions. In contrast, very few abortions were reported after the fact as wanted.

Table 35 shows how prior contraceptive usage, not surprisingly, also increases sharply with increasing ages of first conception, undoubtedly reflecting partly the greater number of years in which the older women could have used contraception as well as a greater tendency for older women to use contraception *per se*. This finding is consistent with the much higher wantedness probabilities for women conceiving at older ages.

On an age-specific basis, there is no systematic evidence of contraceptive use being associated with pregnancy outcome. For women who first conceived before age 17 or after their 20th birthday, prior reported contraceptive use rates do not vary according to whether or not the pregnancy resulted in a miscarriage, abortion or live birth. Also, within pregnancy outcome categories, white women were always more likely to have ever used contraception than their black or Hispanic counterparts.

Table 36 shows how even when the sample is limited to women who had not wanted their first pregnancy, the majority of young respondents had not contracepted prior to the pregnancy. For first conceptions prior to age 17

Table 34 Percent Wanting First Pregnancy by Age at First Conception, Race and Termination Status of Pregnancy

Race and age at first conception	Percent wanting first pregnancy							
	Total		Miscarriage		Abortion		Live births	
Total race	42.1	(2304)	43.9	(264)	1.9	(215)	47.5	(1825)
Under 17	32.1	(727)	36.2	(49)	3.5	(65)	35.8	(613)
17-19	39.9	(1045)	35.2	(125)	2.7	(89)	45.0	(831)
20 and over	58.1	(532)	59.7	(90)	0.0	(61)	69.4	(381)
White	43.3	(1224)	43.6	(162)	1.6	(154)	50.8	(908)
Under 17	35.1	(311)	-	(21)	1.55	(46)	41.8	(244)
17-19	39.0	(565)	31.6	(77)	3.1	(63)	45.4	(425)
20 and over	58.0	(348)	60.7	(64)	0.0	(45)	70.3	(239)
Black	31.7	(717)	40.7	(27)	1.8	(38)	32.5	(615)
Under 17	32.8	(301)	-	(17)	-	(11)	21.7	(273)
17-19	36.3	(303)	(44.7	(29)	-	(17)	37.0	(257)
20 and over	48.1	(113)	-	(18)	-	(10)	56.7	(85)
Hispanic	57.3	(369)	54.8	(38)	9.1	(24)	60.9	(307)
Under 17	47.1	(117)	-	(11)	-	(8)	51.7	(98)
17-19	56.3	(179)	-	(19)	-	(10)	59.2	(150)
20 and over	77.4	(73)	-	(8)	-	(6)	80.6	(59)

Table 35 Percent Ever Using Contraception Preceding First Pregnancy by Age at First Conception,[a] Race and Termination Status of Pregnancy

Race and age at first conception	Percent ever using contraception			
	Total	Miscarriage	Abortion	Live births
Total race	44.4	54.0	49.5	42.1
Under 17	21.6	22.9	19.8	21.9
17-19	44.8	53.9	56.0	42.1
20 and over	70.5	69.9	70.1	70.8
White	49.0	57.8	50.6	47.0
Under 17	22.6	-	21.5	22.6
17-19	48.3	57.2	58.7	45.1
20 and over	73.5	71.0	69.5	75.4
Black	35.2	36.3	42.3	34.7
Under 17	22.7	-	-	22.7
17-19	39.6	23.7	-	41.7
20 and over	60.4	-	-	58.3
Hispanic	26.5	47.6	40.9	23.4
Under 17	12.9	-	-	12.9
17-19	25.5	-	-	20.0
20 and over	51.2	-	-	45.8

[a] Age at inception of pregnancy is defined as respondent's age nine months preceding live birth date or specified number of months preceding termination of pregnancy which did not result in a live birth. Sample of women 17 to 24 at 1982 survey date who have had a first pregnancy. Excludes women pregnant for the first time at 1982 survey date. See Table 33 for sample sizes.

Table 36 Contraceptive Usage Preceding First Pregnancy for Young Women Not Wanting Their First Pregnancy by Age at First Conception,[a] Race and Termination Status of First Pregnancy

(Percent ever contracepting prior to first pregnancy)

Race and age at conception	Total		Aborted first pregnancy		Had miscarriage		Had live birth	
Total race	40.2	(1317)	51.2	(208)	58.3	(148)	34.3	(967)
Under 17	20.2	(497)	23.8	(61)	15.3	(32)	19.9	(404)
17-19	43.8	(603)	57.9	(86)	59.3	(72)	37.9	(445)
20 and over	69.3	(217)	70.3	(61)	88.6	(38)	62.4	(118)
White	44.3	(684)	52.5	(150)	63.0	(88)	37.5	(446)
Under 17	21.1	(204)	25.4	(45)		(13)	19.9	(146)
17-19	46.4	(331)	60.5	(60)	61.6	(47)	39.3	(224)
20 and over	70.9	(149)	69.3	(45)	90.2	(28)	65.1	(76)
Black	32.8	(479)	43.4	(37)	36.1	(37)	31.6	(405)
Under 17	20.5	(234)	-	(10)	-	(11)	20.9	(213)
17-19	38.8	(195)	-	(17)	-	(17)	40.2	(161)
20 and over	66.9	(50)	-	(10)	-	(9)	60.4	(31)
Hispanic	21.5	(159)	41.2	(22)	52.8	(17)	14.3	(120)
Under 17	11.2	(61)	-	(6)	-	(8)	12.5	(47)
17-19	26.4	(79)	-	(10)	-	(8)	14.4	(61)
20 and over	39.4	(19)	-	(6)	-	(1)	-	(12)

[a] Age at beginning of pregnancy. Sample of women 17 to 24 at 1982 survey date who have a first pregnancy. Sample sizes in parentheses.

which were reported after the fact as not wanted, only 20 percent of respondents reported that they had been using contraception. This percentage increases to about 70 percent for women not wanting their pregnancy who conceived after age 20. It is of some interest to note that the substantial black-white differentials noted for so many other of the fertility statistics are not in evidence here. Once one limits the sample to black and white women who retrospectively report they did not want the pregnancy, racial differences in contraceptive use tend to vanish. In contrast, Hispanic women who did not want their first pregnancy were substantially less likely than their black or white counterparts to have used contraception.

Some rational consistency does appear in the association between prior contraceptive use and pregnancy outcome for these women who did not want their first pregnancy. For all races and, overall, for all ages at conception, women who aborted their first pregnancy were more likely to have been using contraception before the pregnancy than women whose pregnancy resulted in a live birth.

Overall, women who had a miscarriage were most likely to have been using contraception, a finding which may reflect the possibility that women with known health problems were more likely to be using contraception in order to avoid a pregnancy.

Table 37 provides a final summary table on the associations between pregnancy wantedness, pregnancy outcome and age at first conception. The reported abortion rate is clearly closely associated with retrospectively reported pregnancy wantedness, particularly for white women, and less for black and Hispanic women. From a different perspective, over 80 percent of those who report after the fact that they didn't want their first pregnancy, did not have an abortion.

Table 37 Termination Status of First Pregnancy by Age at Conception, Wantedness Status and Race

Race and age at conception	Percent having abortion			Percent with miscarriage			Percent with live birth			Sample sizes		
	Total	Wanted pregnancy	Didn't want pregnancy	Total	Wanted pregnancy	Didn't want pregnancy	Total	Wanted pregnancy	Didn't want pregnancy	Total	Wanted pregnancy	Didn't want pregnancy
Total race	11.0	0.5	18.6	12.0	12.6	11.7	77.0	86.9	69.7	2308	991	1317
Under 17	11.8	1.0	16.8	6.9	7.8	6.4	81.4	91.2	76.8	731	234	497
17-19	9.1	0.6	14.8	12.6	11.2	13.6	78.2	88.2	71.6	1045	442	603
20 and over	13.7	0.0	32.7	17.1	17.5	16.6	69.2	82.5	50.7	532	315	217
White	13.4	0.5	23.2	13.4	13.4	13.3	73.3	86.0	63.6	1226	542	684
Under 17	16.8	0.6	25.5	7.2	8.3	6.6	76.0	91.1	67.9	313	109	204
17-19	10.8	0.9	17.2	13.8	11.4	15.4	75.4	87.8	67.4	565	234	331
20 and over	14.8	0.0	35.3	18.0	18.7	17.0	67.2	81.3	47.7	348	199	149
Black	5.1	0.4	7.3	8.3	10.7	7.2	86.6	88.9	85.5	718	239	479
Under 17	3.5	1.4	4.1	5.6	7.6	5.0	90.9	91.0	90.9	302	68	234
17-19	4.9	0.0	7.7	8.4	10.7	7.1	86.7	89.3	85.2	303	108	195
20 and over	10.5	0.0	20.4	15.9	14.8	16.9	73.6	85.2	62.5	113	63	50
Hispanic	5.3	0.6	11.4	10.0	9.3	10.9	84.8	90.0	77.7	370	211	159
Under 17	7.3	2.4	11.7	9.2	5.9	12.0	83.5	91.7	76.4	118	57	61
17-19	3.5	0.0	8.1	11.2	11.0	11.3	85.3	89.0	80.6	179	100	79
20 and over	5.9	0.0	-	8.6	9.8	-	85.5	90.2	-	73	54	19

The overall as well as the race and age-specific miscarriage rates do not appear to be related in any significant or systematic way to the reported wantedness or nonwantedness of the pregnancy. This is a further piece of evidence in support of the notion that reported miscarriages for the most part were probably being honestly reported, and were not in actuality induced abortions.

E. Current Sexual Activity and Contraceptive Usage

Whereas the preceding section focused on retrospective reports on contraception usage for time periods which could be several years in the past, the results presented in this section relate to sexual activity and contraception use for the month preceding the 1982 survey week. Most of the results presented here will focus on never-married respondents. Generally, the tables will present separate tabulations for youth age 17 to 20 and age 21 and over. From the perspective of adolescent sexual activity, the tabulations of perhaps the greatest interest are those for never-married 17-to-20 year-old respondents.

Tables 38 through 40 provide summary measures of the extensiveness of current sexual activity for never-married respondents by race and age, and Table 41 presents in somewhat greater detail a distribution of the contraceptive methods used by the sexually active. Overall, about 70 percent of the never-married males and 55 percent of the females in the sample are currently (within the past thirty days) sexually active. Reported sexual activity levels are highest for the black males and females and lowest for the white males and Hispanic females. By far the greatest within-race disparity was for the Hispanic respondents; 72 percent of the males but only 44 percent of the females have been sexually active in the past month.

Table 38 Summary of Contraceptive Usage and Sexual Activity by Race/Ethnicity and Sex: All Respondents

	Total population								Sexually active							
	Total		White		Hispanic		Black		Total		White		Hispanic		Black	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Not sexually active	26.4	31.2	28.6	32.5	22.6	36.0	14.5	21.6	-	-	-	-	-	-	-	-
Sex. active - no contraception	16.3	8.8	15.2	8.5	20.5	9.3	20.3	10.7	22.1	12.8	21.3	12.6	26.5	14.5	23.8	13.6
Currently pregnant	3.3	5.8	3.0	5.4	5.2	8.0	4.2	7.1	4.5	8.4	4.2	8.0	6.7	12.5	4.9	9.0
Sterilized	1.3	2.8	1.4	2.6	1.1	2.7	1.1	3.9	1.8	4.1	1.9	3.9	1.5	4.2	1.3	5.0
Effective contrac.[a]	45.4	46.5	45.1	46.0	39.7	38.8	50.4	52.5	61.7	67.7	63.2	68.2	51.3	60.7	59.0	67.0
Ineffective contrac.[a]	7.3	4.8	6.6	4.9	10.8	5.1	9.5	4.2	9.9	7.0	9.3	7.2	14.0	8.0	11.1	5.4
Sample size	6004	5977	3576	3538	921	939	1525	1517	4661	4288	2660	2521	714	592	1303	1190
	Never married respondents								Never married sexually active respondents							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Not sexually active	31.8	46.1	35.1	49.7	27.7	56.3	16.2	26.2	-	-	-	-	-	-	-	-
Sex. active - no contraception	16.8	7.1	15.7	6.6	22.2	6.7	20.3	9.7	24.6	13.1	24.2	13.2	30.7	15.4	24.2	13.1
Currently pregnant	0.9	1.8	0.3	0.9	2.5	2.8	2.9	5.7	1.3	3.4	0.5	1.9	3.4	6.4	3.5	7.7
Sterilized	0.4	0.6	0.3	0.3	0.5	1.1	0.9	1.8	0.6	1.1	0.4	0.5	0.7	2.6	1.0	2.4
Effective contrac.[a]	42.4	40.1	41.5	38.1	35.6	28.2	50.1	52.9	62.2	74.5	63.9	75.8	49.2	64.7	59.8	71.7
Ineffective contrac.[a]	7.7	4.3	7.1	4.4	11.5	4.8	9.6	3.7	11.3	7.9	10.9	8.7	16.0	10.9	11.5	5.0
Sample size	4684	3760	2657	2040	712	564	1329	1170	3397	2181	1779	1090	517	242	1113	861

[a] Effective contraception includes the following methods: pill, condom, foam, jelly or cream alone, suppository/insert, diaphragm, douching after intercourse and IUD. Ineffective contraception refers to natural family planning (or safe period by temperature or cervical mucus test), rhythm (or safe period by calendar), withdrawal, abstinence (or intercourse more than one month apart) and any other unlisted method. In instances where the respondent was using both effective and ineffective methods, he/she is included only in the former category.

Table 39 Summary of Contraceptive Usage and Sexual Activity: Respondents Age 17-20

	Total population								Sexually active							
	Total		White		Hispanic		Black		Total		White		Hispanic		Black	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Not sexually active	34.9	44.7	38.7	46.1	27.7	50.9	16.4	32.9	-	-	-	-	-	-	-	-
Sex. active - no contraception	14.7	8.5	13.5	8.8	19.9	8.7	18.9	8.0	22.6	15.4	22.0	16.3	27.5	17.8	22.6	11.9
Currently pregnant	1.8	4.9	1.4	4.4	4.4	7.9	3.0	6.5	2.8	8.9	2.3	8.2	6.1	16.1	3.6	9.7
Sterilized	0.6	0.4	0.6	0.4	0.7	0.4	0.7	0.6	0.9	0.7	0.9	0.7	1.0	0.8	1.3	1.0
Effective contrac.[a]	39.8	37.5	38.3	36.4	36.5	27.0	50.8	48.2	61.2	67.7	62.5	67.5	50.5	55.0	60.7	71.8
Ineffective contrac.[a]	8.1	4.0	7.5	3.9	10.8	5.1	10.3	3.8	12.5	7.2	12.3	7.3	14.9	10.3	12.3	5.6
Sample size	2758	2676	1548	1490	476	477	743	717	1942	1566	992	653	344	236	615	484
	Never married respondents								Never married sexually active respondents							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Not sexually active	36.7	53.8	40.7	56.8	30.5	63.1	16.6	34.9	-	-	-	-	-	-	-	-
Sex. active - no contraception	14.9	7.1	13.6	7.2	21.0	6.2	18.9	8.0	23.5	15.4	23.0	16.6	30.3	16.7	22.7	12.3
Currently pregnant	0.9	2.0	0.5	1.2	2.5	3.8	2.4	5.3	1.4	4.4	0.8	2.9	3.6	10.4	2.8	8.2
Sterilized	0.3	0.3	0.2	0.2	0.4	0.0	0.7	0.6	0.5	0.5	0.4	0.5	0.6	0.0	0.9	0.9
Effective contra.[a]	39.2	33.1	37.6	31.0	33.6	22.1	51.1	47.4	61.9	71.7	63.4	71.7	48.4	59.7	61.3	72.8
Ineffective contra.[a]	8.1	3.7	7.3	3.6	12.0	4.9	10.3	3.8	12.7	8.0	12.4	6.3	17.2	13.2	12.4	5.8
Sample size	2575	2183	1434	1156	426	375	724	660	1768	1093	883	529	297	140	597	431

[a] See footnote a, Table 38 for a definition of effective/ineffective contraceptive methods.

Table 40 Summary of Contraceptive Usage and Sexual Activity: Respondents Age 21 and Over

	Total population								Sexually active							
	Total		White		Hispanic		Black		Total		White		Hispanic		Black	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Not sexually active	18.7	19.3	19.8	20.4	16.9	22.5	12.8	11.4	-	-	-	-	-	-	-	-
Sex. active - no contraception	17.7	9.1	16.7	8.3	21.3	9.8	21.6	13.1	21.7	11.3	20.9	10.4	25.6	12.6	24.8	14.8
Currently pregnant	4.7	6.6	4.5	6.3	6.3	8.1	5.3	7.5	5.7	8.1	5.6	7.9	7.6	10.5	6.0	5.4
Sterilized	2.0	4.9	2.1	4.6	1.8	5.0	1.5	6.9	2.5	6.1	2.6	5.8	2.1	6.4	1.7	7.8
Effective contra.[a]	50.5	54.6	51.1	54.6	42.9	49.5	50.1	56.5	62.1	67.6	63.7	68.7	51.7	63.9	57.4	63.7
Ineffective contrac.[a]	6.5	5.5	5.8	5.7	10.8	5.2	8.8	4.6	8.0	6.9	7.3	7.2	13.0	6.7	10.0	5.2
Sample size	3246	3301	2028	2048	445	462	782	800	2719	2722	1668	1668	370	356	688	706
	Never married respondents								Never married sexually active respondents							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Not sexually active	25.8	34.8	26.0	39.0	23.6	44.1	15.6	15.4	-	-	-	-	-	-	-	-
Sex. active - no contraception	19.2	7.0	18.3	5.8	[illegible]	7.7	21.9	11.8	25.8	10.8	25.4	9.5	31.2	13.8	25.9	14.0
Currently pregnant	0.8	1.6	0.1	0.4	[illegible]	1.4	3.6	6.1	1.1	2.4	0.2	0.7	3.2	2.4	4.3	7.2
Sterilized	0.5	1.0	0.4	0.3	0.9	3.2	1.1	3.3	0.7	1.6	0.5	0.5	1.2	5.7	1.3	3.9
Effective contrac.[a]	46.5	50.4	46.5	48.9	38.4	39.1	49.0	59.7	62.6	77.4	64.5	80.2	50.2	69.9	58.1	70.6
Ineffective contrac.[a]	7.3	5.1	6.8	5.5	10.9	4.5	8.8	3.7	9.8	7.9	9.4	9.1	14.2	8.1	10.4	4.3
Sample size	2109	1577	1223	884	286	189	605	510	1629	1088	896	561	220	102	516	430

[a] See footnote a, Table 38 for a definition of effective/ineffective contraceptive methods.

Table 41 Distribution of Current Contraceptive use of Never Married Sexually Active Respondents by Sex of Respondent, Race/Ethnicity and Age

	17 to 20 Year Olds								21 and Over							
	Male				Female				Male				Female			
	Total	White	Black	Hispanic	Total	White	Black	Hispanic	Total	White	Black	Hispanic	Total	White	Black	Hispanic
Pill	28.7	30.3	24.1	24.9	55.7	55.9	59.2	41.8	38.5	41.4	29.2	27.4	55.1	55.4	54.8	55.7
Condom, rubber	33.7	34.2	36.3	21.1	8.1	8.5	6.6	6.6	21.8	20.9	26.2	18.7	5.8	7.1	2.3	2.8
Foam	2.2	2.0	3.0	1.9	1.2	1.1	1.5	1.7	1.8	1.8	1.7	1.5	1.6	1.6	1.5	0.8
Jelly or cream alone	0.7	0.5	0.8	1.2	0.9	0.5	2.7	0.0	1.3	1.1	2.5	0.4	0.4	0.0	1.8	0.0
Suppository or insert	1.0	1.1	0.3	0.7	0.4	0.3	0.8	0.0	1.2	1.2	1.2	1.6	1.1	1.1	1.1	0.0
Diaphragm with or without jelly or cream	1.7	1.8	1.4	1.6	5.1	5.8	2.8	3.2	4.9	5.7	2.4	4.6	11.4	14.8	2.5	6.5
Douching after intercourse	0.6	0.4	1.1	2.1	1.5	1.0	3.0	0.4	0.4	0.2	1.7	0.0	0.8	0.2	2.9	0.0
IUD, coil, loop	0.7	0.7	1.1	0.3	2.2	1.2	4.6	6.4	2.1	2.1	2.3	1.2	4.4	4.0	5.4	5.4
Operation-female sterilization, tubes tied	0.7	0.7	1.0	0.2	0.7	0.4	1.7	0.0	0.4	0.2	1.2	0.4	1.4	0.2	4.1	4.7
Operation-male sterilization, vasectomy	0.1	0.0	0.3	0.6	0.4	0.5	0.0	0.0	0.4	0.4	0.2	1.0	0.4	0.3	0.2	1.8
Natural family planning, safe period or cervical mucus test	2.5	1.9	4.0	5.0	1.5	1.4	1.2	3.6	2.1	1.7	3.2	2.5	1.5	1.7	0.6	4.0
Rhythm or safe period by calendar	3.9	4.1	2.8	5.0	4.5	4.8	3.0	6.3	4.2	4.1	4.2	5.3	5.2	6.2	2.5	5.2
Withdrawal	5.6	5.6	5.3	5.5	3.6	4.2	1.8	3.3	4.9	4.6	5.1	8.1	4.0	5.3	0.8	0.7
Abstinence/intercourse more than one month apart	4.9	5.2	3.8	4.2	3.3	3.2	3.2	5.1	3.8	4.2	2.1	3.6	3.4	3.3	2.5	1.7
Other	1.4	1.4	1.1	2.3	0.3	0.3	0.3	0.0	0.8	0.7	1.0	0.7	0.2	0.0	0.5	1.8
Sterile	0.8	0.7	1.3	0.8	0.9	0.7	1.7	0.0	0.8	0.6	1.4	1.4	1.7	0.5	4.3	6.5
Currently pregnant	1.4	0.8	2.8	3.7	4.4	2.9	8.0	10.8	1.1	0.0	4.9	3.1	2.5	0.7	7.9	2.1
Not using a method	23.6	23.0	23.1	30.3	15.5	16.6	10.9	16.8	25.9	25.5	25.7	31.2	10.8	9.4	14.0	13.6

NOTE: Percentages exceed 100 percent because respondent may report the use of more than one method. Definition of current sexual activity and contraceptive usage refers to behavior in past month.

Shifting to the younger half of the sample, about 63 percent of the never-married 17 to 20 year-old men and 46 percent of their female counterparts have engaged in sex in the past month. The racial patterns parallel those described for the overall never-married sample, but the levels of sexual activity are moderately lower.

Even among the older half of the NLS cohort, substantial proportions of the never-married are not currently sexually active; about one of every four never-married 21 to 24 year-old males and one of every three females is currently not sexually active. In this regard, there continue to be major racial/ethnic differences, as about 40 percent of the never-married white and 44 percent of the Hispanic females but only 15 percent of the black women of these ages are not active sexually.

Focusing specifically on the never-married sexually active population, it may be seen that there are significant differences in the ability or willingness of young men and women to use contraception. Among the younger 17 to 20 year-old sexually active youth, 24 percent of the males and 15 percent of the females are not using any contraception and an additional 13 percent of the males and 8 percent of the females are using a relatively ineffective method of birth control. Only about 60 percent of the sexually active males and 70 percent of the females are generally using an effective contraceptive method.

These statistics vary widely by race and ethnicity. Only about half of the younger Hispanic men are using an effective form of contraception compared with slightly over 60 percent of the black and white youth. The younger women follow parallel patterns but at slightly higher levels--about 70 percent of the black and white young women and 60 percent of their sexually active never-married Hispanic counterparts. In general, at any given time, relatively large proportions of sexually active male and female teenagers are not protected against an unwanted pregnancy.

Somewhat surprisingly, sexually active never-married young adults age 21 and over are only marginally more likely to be contracepting effectively than the younger respondents. There is no evidence to suggest that there is any significant learning process underway associated with maturation. For both younger and older males, about 62 percent are using an effective form of family planning and for females the percent increases only modestly with age from 72 to 77 percent.

As with the younger respondents, significant racial differences appear as 80 percent of white females are contracepting effectively, compared with 70 percent of the black and Hispanic women. Even at these older ages, only 50 percent of sexually active Hispanic males are using effective contraception compared with 58 percent of blacks and a still low 65 percent of whites. The combined high levels of sexual activity for all of these never-married youth and relatively large proportions not using effective contraception are certainly consistent with and predictive of a relatively high proportion of out-of-wedlock conceptions in this age group.

Table 41 provides somewhat greater detail about the contraceptive methods used by these sexually active youth. For both older and younger women, the pill is by far the most popular method, its use being equally prevalent among the older and younger women.[10] Also, with the sole exception of younger Hispanic women, it is used equally by all the racial and ethnic groups. Although we have no exactly comparable statistics from the data sets, this pattern of the pill being the most popular contraceptive is certainly consistent with the statistics for women age 15-19 in the 1979 Zelnik and Kantner study.[11] The level of pill use in the NLS is somewhat higher, but that may reflect the older average age of the NLS respondent. The second most commonly used method for the older women is the diaphragm, a medically prescribed method, whereas the second most common method cited for the younger women is the condom, which of course is more readily accessible to younger respondents who may not wish to have contact with the medical establishment. The Zelnik and Kantner study suggests a much greater reliance by young females on the condom than suggested by the NLS data, but again, that may also reflect the younger age of the respondents in their study.

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[10] Respondents may cite more than one method as being commonly used.

The most commonly used contraceptive by the older males also is the pill, but a much larger proportion are also using the condom. For younger males, not surprisingly, the condom is the most commonly-used method, no doubt related to its easy access and the perhaps more temporary nature of adolescent male sexual relationships. In this regard, it is likely that many of the younger males are unaware of whether or not their sexual partners are using contraceptive methods.

Tables 42 through 45 summarize the extent to which the level of teenage and young adult sexual activity is sensitive to the youth's religious affiliation. In general, younger (17-20 year-old) men and women in the "other" religious category, most of whom are acknowledging no religious affiliation, tend to be more sexually active. Among the older youth, this religious differential only appears for the women. Focusing more specifically on the sexually active, there are no systematic differences in contraceptive usage by religious affiliation. As may be further noted in Table 45, there

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[11] Table 11 in Zelnik and Kantner op. cit.

Table 42 Summary of Sexual Activity and Contraceptive Usage of Never Married Respondents by Religious Affiliation and Sex

	All never married			Sexually active never married		
	Protestant	Catholic	Other	Protestant	Catholic	Other
Male	100.0	100.0	100.0	100.0	100.0	100.0
Not sexually active	33.4	32.3	25.7	-	-	-
Sexually active - no contraception	15.5	18.8	17.4	23.3	27.8	23.5
Currently pregnant	0.9	0.7	1.1	1.3	1.1	1.4
Effective contraception	41.6	39.2	43.4	62.5	57.9	58.4
Ineffective contraception	8.6	8.9	12.4	12.9	13.2	16.7
Sample size	2422	1419	765	1740	1007	577
Female	100.0	100.0	100.0	100.0	100.0	100.0
Not sexually active	47.5	48.7	34.5	-	-	-
Sexually active - no contraception	6.9	7.2	7.7	13.2	14.0	11.8
Currently pregnant	2.2	1.1	2.3	4.2	2.2	3.5
Effective contraception	38.6	37.6	47.1	73.5	73.3	71.9
Ineffective contraception	4.8	5.4	8.4	9.1	10.6	12.9
Sample size	2050	1207	445	1216	607	304

NOTE: See Table 38.

Table 43 Summary of Sexual Activity and Contraceptive Usage of Never Married Respondents by Religious Affiliation and Sex: Respondents Age 17-20

	All never married			Sexually active never married		
	Protestant	Catholic	Other	Protestant	Catholic	Other
Male	100.0	100.0	100.0	100.0	100.0	100.0
Not sexually active	38.3	38.6	26.6	-	-	-
Sexually active - no contraception	14.0	16.2	15.9	22.6	26.4	21.7
Currently pregnant	0.7	1.0	1.4	1.1	1.6	2.0
Effective contraception	38.1	34.9	44.2	61.8	56.9	60.2
Ineffective contraception	9.0	9.3	11.9	14.5	15.1	16.2
Female	100.0	100.0	100.0	100.0	100.0	100.0
Not sexually active	54.8	55.7	45.0	-	-	-
Sexually active - no contraception	6.9	7.3	7.6	15.3	16.5	13.8
Currently pregnant	2.2	1.4	2.8	4.9	3.2	5.1
Effective contraception	31.9	30.9	38.6	70.6	69.8	70.1
Ineffective contraception	4.2	4.7	6.1	9.2	10.5	11.0

NOTE: See Table 38

Table 44 Summary of Sexual Activity and Contraceptive Usage of Never Married Respondents by Religious Affiliation and Sex: Age 21 and Over

	All never married			Sexually active never married		
	Protestant	Catholic	Other	Protestant	Catholic	Other
Male	100.0	100.0	100.0	100.0	100.0	100.0
Not sexually active	26.9	24.3	24.9	-	-	-
Sexually active - no contraception	17.6	22.2	18.8	24.0	29.3	25.1
Currently pregnant	1.1	0.4	0.7	1.5	0.6	1.0
Effective contraception	46.4	44.7	42.6	63.4	59.0	56.7
Ineffective contraception	8.1	8.4	12.9	11.1	11.1	17.2
Female	100.0	100.0	100.0	100.0	100.0	100.0
Not sexually active	36.8	38.0	19.5	-	-	-
Sexually active - no contraception	6.9	6.9	7.8	10.9	11.2	9.7
Currently pregnant	2.3	0.6	1.6	3.6	1.0	2.0
Effective contraception	48.3	47.8	59.2	76.5	77.1	73.6
Ineffective contraception	5.7	6.6	11.8	9.0	10.7	14.7

NOTE: See Table 38.

Table 45 Contraceptive Usage of Never Married Sexually Active Respondents by Sex, Religious Affiliation and Age

	17 to 20 Year Olds						21 Years and Over					
	Male			Female			Male			Female		
	Protestant	Catholic	Other	Protestant	Catholic	Other	Protestant	Catholic	Other	Protestant	Catholic	Other
Pill	27.9	29.1	30.5	57.8	54.6	50.7	42.2	36.5	32.3	57.9	54.4	47.2
Condom, rubber	36.1	31.5	29.9	8.4	9.1	4.7	22.1	22.5	19.8	4.8	6.4	7.9
Foam	1.4	2.6	4.2	1.1	1.2	1.6	2.7	0.6	1.4	1.5	1.2	2.5
Jelly or cream alone	0.5	0.3	2.0	1.0	0.0	3.0	1.1	1.2	2.1	0.7	0.0	0.5
Suppository or insert	1.1	0.3	1.5	0.3	0.0	1.5	1.5	1.3	0.3	0.4	0.9	3.9
Diaphragm with or with out jelly or cream	1.2	1.7	3.4	3.3	4.0	13.5	3.2	3.9	10.8	9.6	11.6	17.3
Douching after intercourse	0.6	0.5	1.1	1.7	1.1	1.6	0.5	0.2	0.6	1.1	0.3	0.9
IUD, coil, loop	0.6	0.3	2.0	1.6	3.3	2.1	1.6	3.0	1.7	4.4	4.9	3.9
Operation-female sterilization, tubes tied	1.0	0.4	0.1	1.2	0.0	0.4	0.5	0.2	0.4	1.9	0.6	1.2
Operation-male sterilization, vasectomy	0.1	0.1	0.1	0.7	0.0	0.0	0.7	0.1	0.1	0.2	0.8	0.1
Natural family planning, safe period or cervical mucus test	2.1	3.2	2.7	1.2	2.0	1.4	1.9	3.1	0.8	1.2	1.4	2.9
Rhythm or safe period by calendar	3.0	4.2	6.4	4.2	5.8	2.9	3.4	6.0	3.4	3.6	7.5	6.5
Withdrawal	5.9	6.2	3.6	3.5	4.5	2.1	3.5	5.8	6.9	2.1	7.6	3.5
Abstinence/intercourse more than one month apart	5.5	3.3	5.7	2.5	2.8	7.2	2.7	4.1	6.2	3.4	2.1	5.7
Other	1.2	1.4	2.2	0.0	0.6	0.8	1.1	0.2	0.9	0.2	0.3	0.1
Sterile	1.2	0.4	0.2	1.6	0.0	0.4	1.2	0.3	0.4	2.0	1.4	1.3
Currently pregnant	1.1	1.6	2.0	4.9	3.2	5.1	1.5	0.6	1.0	3.6	1.0	2.0
Not using a method	22.6	26.4	21.7	15.3	16.5	13.8	24.0	29.3	25.1	10.9	11.2	9.7

are no significant differences in pill use between protestants, Catholics and those expressing no religion, regardless of age or sex.

The above is not to suggest, however, that there is no important religious effect. As Tables 46 and 47 amply demonstrate, there are important variations in sexual behavior which are related to the strength of one's religious attachment (proxied for here by church attendance), independent of which specific denomination one belongs to. For non-married male and female respondents, increasing frequency of church attendance is powerfully associated with lesser sexual activity, regardless of religious affiliation. Also, (in Table 47) it may be noted that sexually active regular church attenders are somewhat less likely to use the pill, more likely to use a condom or not be using any method of contraception. Thus, as will be suggested further in the following multivariate analyses, the religious factor continues to be of some importance in influencing teenage and young adult sexual behavior in the 1980's.

Table 48 suggests that sexual behavior also is sensitive to social class differentials, a factor also clarified to a greater extent in the regressions which follow. Young men and women whose mothers have attended college are less likely to be sexually active than those whose mothers have completed only high school. Children of women who are high school dropouts have the highest levels of current sexual activity. There are, however, no major differences in contraceptive efficacy along this education dimension except that children of a college educated mother are slightly less likely not to be using any contraceptive method.

Finally, as Table 49 suggests, the connection between sexual activity, contraceptive use and shorter term fertility planning for adolescents, while far from perfect, is also far from random. For example, young males and

Table 46 Sexual Activity/Contraceptive Usage of White Never Married Respondents by Sex, Religious Affiliation and Frequency of Church Attendance

	Protestants				Catholics				Other/no religion			
	Total	Weekly attendance	Attend quarterly	Attend less than quarterly	Total	Weekly attendance	Attend quarterly	Attend less than quarterly	Total	Weekly attendance	Attend quarterly	Attend less than quarterly
Male	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			100.0
Not sexually active	38.4	56.9	39.7	25.8	34.2	43.3	32.0	25.8	26.9			24.9
Sexually active - no contraception	14.3	11.7	11.7	17.3	18.0	18.9	17.3	17.4	15.9			16.0
Currently pregnant	0.2	0.1	0.0	0.3	0.3	0.0	2.0	0.0	0.5			0.6
Effective contraception	39.5	26.3	39.8	47.9	39.1	30.0	41.9	48.0	45.3			47.7
Ineffective contraception	7.6	5.0	8.8	8.6	8.1	7.9	6.8	8.8	11.4			11.4
Female	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			100.0
Not sexually active	54.2	67.0	51.9	42.9	48.3	59.5	40.6	34.1	37.3			33.3
Sexually active - no contraception	6.4	6.1	5.0	7.5	7.0	5.8	7.6	8.5	6.7			6.4
Currently pregnant	1.1	1.5	0.0	1.3	0.0	0.7	1.2	0.1	1.2			1.6
Effective contraception	34.1	22.0	36.7	44.5	38.9	29.9	42.8	51.1	46.6			49.6
Ineffective contraception	4.2	3.5	6.4	3.7	5.3	4.1	7.7	6.3	8.2			9.2

NOTE: See Table 38.

Table 47 Contraceptive Usage of Never-Married Sexually Active White Respondents by Sex, Religious Affiliation and Church Attendance

	Male							Female						
	Protestant			Catholic			Other or no religion	Protestant			Catholic			Other or no religion
	Weekly attendance	Quarterly attendance	Attends less than quarterly	Weekly attendance	Quarterly attendance	Attends less than quarterly		Weekly attendance	Quarterly attendance	Attends less than quarterly	Weekly attendance	Quarterly attendance	Attends less than quarterly	
Pill	31.3	36.8	39.7	33.6	28.9	36.0	34.7	53.7	57.6	59.3	53.9	51.6	59.2	48.7
Condom, rubber	31.7	33.6	24.9	22.9	32.3	30.2	25.6	10.0	7.8	6.5	10.9	10.0	5.9	6.9
Foam	0.9	0.1	3.0	2.4	0.0	1.7	2.5	4.2	1.2	0.1	0.9	2.2	0.7	1.7
Jelly or cream alone	0.9	0.0	0.4	0.1	0.0	1.4	2.1	0.0	0.0	0.0	0.0	0.0	0.0	1.5
Suppository or insert	1.7	0.9	1.9	0.0	0.3	1.5	0.9	0.1	0.0	0.2	0.0	0.0	1.0	2.9
Diaphragm with or without jelly or cream	2.3	2.2	2.7	2.2	2.4	3.0	7.7	3.7	11.4	10.6	5.5	10.6	9.8	18.6
Douching after intercourse	0.0	0.3	0.4	0.0	0.0	0.1	0.6	0.3	1.9	0.0	0.0	2.1	0.9	0.9
IUD, coil, loop	0.2	0.2	1.4	2.5	0.3	1.9	1.9	1.0	1.4	2.4	4.0	4.6	2.9	2.5
Operation-female sterilization, tubes tied	0.9	0.0	0.7	0.0	0.0	0.6	0.3	0.9	0.0	0.7	0.0	0.0	0.0	0.1
Operation-male sterilization, vasectomy	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.8	1.2	0.2	0.0	0.0	0.7	0.1
Natural family planning, safe period or cervical mucus test	1.5	1.7	1.4	2.8	1.7	3.3	1.2	0.2	1.4	1.8	1.5	0.6	1.6	2.6
Rhythm or safe period by calendar	1.3	7.0	2.0	6.3	5.5	4.2	5.3	3.7	6.8	3.8	3.8	9.7	9.4	5.3
Withdrawal	4.1	4.2	4.8	6.0	8.7	4.7	5.4	4.6	7.7	1.7	5.4	10.6	7.1	2.7
Abstinence/intercourse more than one month apart	7.6	5.9	2.9	3.4	6.1	3.5	6.4	4.2	6.5	1.4	2.9	0.6	2.2	6.8
Other	0.9	1.0	1.5	1.8	0.0	0.0	1.3	0.0	0.0	0.0	0.9	0.0	0.0	0.4
Sterile	0.9	0.0	1.4	0.0	0.0	0.6	0.3	0.9	1.2	1.0	0.0	0.0	0.7	0.2
Currently pregnant	0.2	0.0	0.4	0.0	2.9	0.0	0.7	4.4	0.0	2.3	1.7	2.1	0.1	2.0
Not using a method	27.0	19.5	23.4	33.3	25.4	23.5	21.7	18.4	18.5	13.2	14.2	12.8	13.0	10.6

Table 48 Current Sexual Activity and Contraceptive Usage of Never Married Respondents by Respondents' Mother's Education

	Male			Female		
Mother's education	Less than high school	12 years	College	Less than high school	12 years	College
Not sexually active	26.5	31.9	39.5	38.5	48.1	52.4
Sexually active	73.5	68.1	60.5	61.5	51.9	47.6
Not using a method	18.4	16.6	12.9	9.7	7.3	3.7
Currently pregnant	1.8	0.4	0.5	4.1	1.2	0.3
Using effective method	42.0	41.8	39.9	41.2	39.6	36.6
Using ineffective method	11.4	9.1	7.2	6.4	3.7	7.0
Sexually Active	100.0	100.0	100.0	100.0	100.0	100.0
Pill	32.7	33.2	35.4	54.8	58.4	51.3
Condom, rubber	27.1	28.5	30.4	5.5	7.3	9.0
Foam	1.6	2.1	2.6	0.7	0.9	3.4
Jelly or cream alone	1.1	0.4	1.0	1.6	0.6	0.8
Suppository or insert	1.1	0.9	1.2	0.5	0.6	1.1
Diaphragm with or without jelly or cream	1.1	3.4	6.8	2.6	8.7	16.2
Douching after intercourse	1.1	0.3	0.3	2.0	1.0	0.2
IUD, coil, loop	1.1	1.8	1.2	3.7	2.0	3.8
Operation-female sterilization, tubes tied	0.7	0.4	0.5	1.8	0.8	0.0
Operation-male sterilization, vasectomy	0.4	0.1	0.2	0.2	0.6	0.2
Natural family planning, safe period or cervical mucus test	3.4	1.5	2.5	1.1	1.7	1.1
Rhythm or safe period by calendar	2.9	5.0	4.3	3.6	5.8	5.5
Withdrawal	5.0	5.0	6.3	3.9	3.5	4.4
Abstinence/intercourse more than one month apart	3.4	5.3	4.1	2.1	3.1	6.1
Other	1.5	1.2	0.5	0.3	0.2	0.6
Sterile	1.1	0.6	0.7	2.0	1.2	0.2
Currently pregnant	2.4	0.6	0.8	6.7	2.3	0.6
Not using a method	25.0	24.4	21.3	15.8	14.1	7.8

NOTE: See Table 38.

Table 49 Contraceptive Usage and Sexual Activity by Fertility Expectations and Current Age

	17-20 years				21 and over years			
	Expect next child				Expect next child			
	1-2 years	3-4 years	5 or more years	Don't expect children	1-2 years	3-4 years	5 or more years	Don't expect children
Male	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Not sexually active	18.3 (-)	33.6 (-)	39.6 (-)	32.6 (-)	7.3 (-)	21.4 (-)	27.3 (-)	18.5 (-)
Sexually active - no contraception	25.8 (31.6)	13.2 (18.1)	13.6 (22.5)	15.1 (22.4)	20.3 (21.9)	16.5 (21.0)	16.7 (23.0)	19.6 (24.0)
Currently pregnant	-	-	-	-	-	-	-	-
Sterilized	0.9 (1.5)	0.2 (0.3)	0.5 (0.8)	2.5 (5.5)	0.9 (1.0)	0.6 (0.8)	0.5 (0.7)	11.1 (13.6)
Effective contraception	42.5 (52.0)	41.6 (62.7)	38.4 (63.6)	37.4 (55.5)	58.6 (63.2)	52.5 (66.8)	47.4 (65.2)	39.7 (48.7)
Ineffective contraception	12.5 (15.3)	11.5 (17.3)	8.0 (11.2)	12.3 (18.2)	12.8 (13.8)	9.0 (11.5)	8.1 (11.1)	11.1 (13.6)
Sample size	385	547	1342	254	818	663	921	493
Female	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Not sexually active	16.3	40.3	60.2	38.1	8.6	27.3	32.3	13.7
Sexually active - no contraception	24.0 (28.7)	8.9 (14.9)	5.4 (13.6)	6.2 (10.0)	18.2 (19.9)	5.9 (8.1)	4.3 (6.4)	7.6 (8.8)
Currently pregnant	-	-	-	-	-	-	-	-
Sterilized	0.2 (0.2)	0.1 (0.2)	0.3 (0.8)	2.8 (4.5)	0.5 (0.5)	0.2 (0.3)	0.1 (0.1)	22.5 (26.1)
Effective contraception	49.5 (59.1)	46.1 (77.2)	29.3 (73.6)	48.9 (79.0)	61.7 (67.5)	57.5 (79.1)	54.7 (80.8)	49.5 (57.4)
Ineffective contraception	10.0 (11.9)	4.9 (8.2)	4.7 (11.8)	4.0 (6.5)	11.1 (12.1)	9.1 (12.5)	8.5 (12.6)	6.6 (7.6)
Sample size	389	567	1082	328	869	652	624	745

NOTE: ( ) = distribution of contraceptive use among the sexually active. Sample excludes currently pretnant. "Don't expect children" category includes respondents who have already had children but do not expect any more. See Table 38 for additional notes females age 17 to 20 expecting a child during the next two years (but not currently pregnant) are much more likely to be currently sexually active, and if sexually active, less likely to be contracepting at all or contracepting effectively than those youth not expecting a child until further in the future. Somewhat disconcertingly, however, even among those youth who indicate that they do not ever expect to have a child (or an additional child), relatively large proportions are sexually active but not using contraception effectively; for sexually active males age 17-20 who are expecting no (additional) children, 41 percent either are not using contraception at all or are using a less effective method. This statistic is almost the same for the older men.

F. Child Care Arrangements in 1982*

In this section, the focus is on one of the important consequences of teenage and young adult childbearing, the ability of the young parent to carry out alternate employment or educational activities in spite of the presence of an infant or young child. In this regard, it is useful to emphasize that the family situations reported here may not typify those of a full cross-section of contemporary American mothers and fathers. The parents requiring childcare assistance in this study are on the average younger themselves, with younger children of their own. They are less likely than older parents to be able to utilize their own older children for childcare assistance; on the other hand, they may be somewhat more likely than other parents to have assistance from siblings or other members of their own parental household. Finally, there is a somewhat greater likelihood that they will need childcare assistance for educational activities, whereas a wider age range of mothers would be more likely to be employed. One implication of this is that parents in this age group may be less likely to have funds available to pay for outside childcare assistance. The somewhat lower proportion using group care centers in this sample compared with that shown in other studies may be related to this fact.[12]

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*This section was prepared by Paula Baker.

In the 1982 NLS survey, parents with at least one of their own children in the household were asked whether they were currently enrolled, employed or in the military, or in a training program. Those involved in at least one of these activities were then asked who usually takes care of their youngest child. Parents with more than one child in the home were asked this same question regarding the care of their next youngest child. Respondents were allowed multiple responses as to the type of care they used.

As may be seen in Table 50, more than half of all parents responded that they use some form of childcare. Care by a member of the respondent's immediate family (both in and outside of the respondent's home) accounts for the majority of childcare arrangements made by both fathers and mothers. Much smaller proportions used non-relatives and only modest proportions made use of more formal day care centers. This pattern is generally consistent with totals reported in the U.S. Census study mentioned above.

The distribution of nonusers and the arrangements made by parents who use childcare are broken down by sex of parent in Table 50. While it appears that a substantially greater proportion of fathers use childcare, the reader should note that more than 70 percent of the male respondents indicated that they

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[12] See, for example, the statistics presented in Tables A and A6 of Trends in Child Care Arrangements of Working Mothers by Marjorie Lveck, Ann C. Orr and Martin B. O'Connell, U.S. Bureau of the Census, Current Population Reports, P-23, No. 117, June 1982. Table A6 highlights the greater ability of higher income families to use group care options.

Table 50 Type of Childcare Used for Youngest and Next Youngest Child[a]

Type of child care	Males		Females	
	Youngest	Next youngest[b]	Youngest	Next youngest[b]
% of parents not using child care	15.7	17.1	56.0	61.1
% of parents using child care	100.0[c]	100.0[c]	100.0[c]	100.0[c]
In home by other parent	71.2	77.5	24.0	29.8
In home by sibling	0.5	0.0	1.0	0.5
In home by other relative	4.3	2.9	18.2	16.5
In home by non-relative	1.1	1.9	4.9	6.0
In relative's home	10.5	10.3	23.0	21.7
In non-relative's home	6.8	2.9	19.9	16.4
Public child care center	1.4	1.0	4.5	3.9
Private child care center	3.1	2.9	8.4	5.8
Child cares for self	0.0	0.7	0.1	0.8
R cares for child at work	0.0	0.0	2.0	3.2
R works only while child in school	0.2	0.0	1.1	2.3
Other/NA	0.8	0.0	0.7	0.2
Number of parents	718	243	1,964	726

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[a] Universe consists of respondents with own children in household.
[b] Universe also restricted to respondents with more than one child.
[c] Percentage distribution may add to over 100 percent since respondents were allowed multiple responses.

rely on the child's mother as the principal provider of care. About 15 percent of the fathers responded that their children are cared for in their own home by a relative or in the relative's home. Very small percents of fathers made use of siblings or nonrelatives in their own homes. However, nearly seven percent of the fathers said they leave their children in a nonrelative's home and about five percent indicated they used a private or public day care center. Of some importance, only a minute proportion of fathers handle childcare by adjusting their work, school, or training schedule. No fathers indicated that they care for their children at work or that their children are left on their own.

More than half of the mothers interviewed said they do not use childcare. Of those mothers using childcare, somewhat surprisingly, about a fourth indicated that the child's father provides the care. Given the youthful age of the sample, this may reflect the possibility that many of the fathers are still enrolled in school and thus have more flexibility in their schedules than might be possible if they have fulltime jobs. Nearly the same proportion said they have their children cared for in a relative's home, while less than a fifth rely on relatives in the respondent's own home. Only about 10 percent of responding mothers use either a private or public center and two percent care for their children while working.

Patterns of childcare by parents who use childcare are broken down by sex and marital status of parent in Table 51. It may be noted in this table that the proportion of mothers and fathers with no spouse present who share childcare responsibilities with the child's other parent is quite substantial. About 60 percent of the relatively small proportion of the unmarried fathers responded that they turn to the child's mother when they need care for their children. It is important to emphasize that a large

Table 51 Type of Childcare Used for Youngest and Next Youngest Child by Respondent's Sex and Marital Status[a]

	Males						Females					
	Total marital status		Married, spouse present		Other marital status		Total marital status		Married, spouse present		Total marital status	
Type of childcare	Youngest	Next youngest[b]	Youngest	Next youngest[b]	Youngest	Next youngest[b]	Youngest	Next youngest[b]	Youngest	Next youngest[b]	Youngest	Next youngest[b]
% of parents not using childcare	15.7	17.1	14.8	17.3	23.6	13.0	56.0	61.1	55.8	58.9	56.3	65.8
% of parents using childcare	100.0[c]	100.0[c]	100.0[c]	100.0[c]	100.0[c]	100.0[c]	100.0[c]	100.0[c]	100.0[c]	100.0[c]	100.0[c]	100.0[c]
In home by other parent	71.2	77.5	72.4	78.3	59.2	60.0	24.0	29.8	31.7	37.6	10.7	10.3
In home by sibling	0.5	0.0	0.5	0.0	0.0	0.0	1.0	0.5	0.7	0.0	1.4	1.7
In home by other relative	4.3	2.9	3.8	2.8	10.8	5.0	18.2	16.5	14.7	16.3	24.1	17.1
In home by non-relative	1.1	1.9	1.2	1.8	0.8	5.0	4.9	6.0	3.1	5.4	8.0	7.4
In relative's home	10.5	10.3	11.0	10.1	5.0	15.0	23.0	21.7	22.8	17.7	23.2	32.6
In non-relative's home	6.8	2.9	6.0	3.0	15.8	0.0	19.9	16.4	20.4	13.8	19.2	22.9
Public child care center	1.4	1.0	1.4	0.8	1.7	5.0	4.5	3.9	3.6	4.1	6.2	3.4
Private child care center	3.1	2.9	3.3	3.0	2.5	0.0	8.4	5.8	7.1	5.9	10.6	5.7
Child cares for self	0.0	0.7	0.0	0.8	0.0	0.0	0.1	0.8	0.2	0.5	0.0	1.7
R cares for child at work	0.0	0.0	0.0	0.0	0.0	0.0	2.0	3.2	2.6	4.5	0.8	0.0
R works only while child in school	0.2	0.0	0.2	0.0	0.0	0.0	1.1	2.3	0.9	1.4	1.4	4.6
Other/NA	0.1	0.0	0.1	0.0	0.0	0.0	0.7	0.2	0.6	0.0	1.0	0.6
Number of parents	718	243	629	223	89	20	1,964	726	1,085	428	879	298

[a] Universe consists of respondents with own children in household.

[b] Universe also restricted to respondents with more than one child.

[c] Percentage distribution may add to over 100 percent since respondents were allowed multiple responses.

proportion of these fathers are black and are indeed living with the mother of the child. In this instance, household living arrangements will be a more meaningful category for interpreting the pattern than marital status. More than 10 percent of the mothers who are not married rely on the child's father for the care of their youngest children. In this instance, the women are generally not living with the father of the child.

The results of a closer look at the determinants of childcare use by working parents are presented in Table 52. The multivariate analyses presented here focus on the care of the youngest child. A dichotomous dependent variable representing use or nonuse of childcare was regressed on a series of variables representing the respondent's background, degree of need for childcare, resources, and residential location. A series of dummy variables for race and parental education were used as background controls. Respondents' aspirations and attitudes about traditionality were represented by a series of dummy variables for educational expectations and a continuous measure of opinions about family roles. A high score on the nontraditionality scale denotes positive attitudes about working wives, while a low score indicates a more traditional orientation regarding family roles and the employment of wives. (The glossary following Section V has a more complete definition.) Information about household composition, including whether a parent of the respondent or a teenager lives in the home, was used as an indication of the level of resources available to the respondent in the event childcare was needed. The quality of the respondent's job was assessed by hourly wage and occupational Duncan socioeconomic index score, both continuous variables. Whether the respondent lives in an urban area was used as a proxy for availability of care. Greater population density tends to be associated with the probability of having access to a day care center. Since a number of

Table 52 Determinants of Childcare Use for Youngest Child for Working Parents with Own Child in Household: Ordinary Least Square Results (Unstandardized Regression Coefficients)

	Mothers			Fathers
	Married Spouse Present	Not married		Married Spouse Present, Spouse Works
		Total	Black	
Black	.067[a]	.003	--	.150
Hispanic	-.010	.062	--	.141
Poor white 1978	.044	.020	--	-.086
Father is high school grad	.009	-.034	-.020	-.274[c]
Father attended college	.032	-.141[a]	-.053	-.226[a]
Mother is high school grad	.062[b]	.054	.128[a]	.105
Mother attended college	.072[a]	.080	.174	.246
Nontraditionality score (1982)	.003	.009	.017	.049[c]
R expects to attend college (1982)	-.060	-.062	.074	-.344[b]
R expects to complete high school (1982)	-.086[a]	-.035	.053	-.125
Spouse works	.066[a]	--	--	--
Child is infant (under 3)	.038	.021	.015	.179
Child is toddler (3 to 5)	.021	-.036	-.015	.244
Teenager (14 through 17) lives in home	-.040	-.015	-.093	-.136
Parent lives in home	.054	-.009	.117	-.148
Log hourly rate of pay	-.024	.052	.050	.026
Duncan SEI score	.001[a]	.001	-.001	.003
R lives in urban area	-.018	-.029	-.016	-.159
R lives in South	-.004	-.020	.051	.133
R lives in Northeast	.065[a]	-.166[b]	-.046	.146

Table 52 Continued

	Mothers			Fathers
	Married Spouse Present	Not married Total	Not married Black	Married Spouse Present, Spouse Works
R lives in West	.041	-.013	.032	.224[b]
Constant	.823	.754	.415	-.306
R^2	.11	.13	.12	.23
Sample size	362	256	128	153

NOTE: See Glossary following Section V for complete specification of variables.

a = significant at .10 level
b = significant at .05 level
c = significant at .01 level

federally sponsored and nonfamily childcare programs have been concentrated in the southern and western regions of the United States, dummy variables representing region of residence were also entered into the equations.

Turning first to employed, married mothers whose spouse is present, mother's education appears to have positive effects on the respondent's propensity to use childcare. Black mothers in this group are slightly more likely to use care, relative to middle income whites. When one considers mothers who have not married, two factors appear to significantly reduce the probability of using care: father's college attendance and residence in the northeast. Among black mothers who are not married, completion of high school increases the likelihood that the respondent will use some form of childcare.

The model for determinants of childcare use by fathers has been restricted to those who are employed and married with a spouse present who also works. The education of the father of the respondent seems to have an independent negative effect on use of childcare, as do the respondent's own expectations to attend college. Consistent with expectations, men with a nontraditional orientation regarding the employment of wives are slightly more likely to use childcare. Interestingly, the mean score on the nontraditionality variable is nearly the same for all married fathers regardless of the employment status of their wives. Also, the likelihood that fathers living in the western United States will use some form of childcare is about 20 percent greater than for those who reside in the north central region, holding constant all other variables.

In order to identify more precisely the factors that influence the kinds of arrangements made by parents who use childcare, the same set of factors was used to predict four childcare outcomes: care of child in the home, reliance on the immediate family, use of public or private centers, and frequency of use by someone other than a parent or sibling. The first three outcomes were treated as dichotomous dependent variables and the last was regressed as a continuous measure of number of hours per week. Means and standard deviations of key variables for users of childcare are listed in Table 53.

The results of regressing the four types of outcomes for all mothers who use childcare are presented in Table 54. The second column in each model separately indicates the effects for black mothers. Respondents whose mothers completed high school or attended college are less inclined to rely on the immediate family for care and more likely to use some form of group care. This effect remains although somewhat less pronounced in the models limited to black respondents. Also, mothers with nontraditional attitudes about family roles and working wives are slightly less likely to arrange for care in their home or with a family member than are those with a more traditional orientation. The presence of a parent in the home significantly affects all four childcare outcomes, particularly for black mothers. Mothers with a parent in the home, not surprisingly, need to rely less on outside care.

Having more than one child tends to encourage mothers to use more in-home care and reduce reliance on group care. Also, when asked about frequency of care by someone other than the child's parent or sibling, mothers with more than one child indicated they use services about four hours less per week relative to mothers with one child. This undoubtedly reflects the greater difficulty to arrange childcare if one has more than one young child in the home, and the likely greater cost associated with making those arrangements.

As one might expect, mothers of infants and toddlers require substantially more hours of care each week than do mothers of school-age children. However, the difference in the frequency of use between mothers of infants and toddlers is minimal.

Table 53 Means and Standard Deviations for Variables in Childcare Use Models

	Mothers				Fathers			
	Total		Black		Total		Employed, married spouse present and spouse works	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
In-home care	.49	.50	.45	.50	.44	.50	.32	.47
Family care	.62	.49	.71	.45	.66	.48	.61	.49
Center	.13	.34	.17	.37	.15	.35	.18	.39
Hours per week	27.7	15.7	27.2	16.1	28.2	15.4	27.4	15.0
Black	.23	.42	100.0	--	.18	.38	.12	.32
Hispanic	.08	.27	0	--	.11	.32	.10	.31
Poor white 1978	.08	.27	0	--	.08	.28	.10	.30
Father is high school grad	.34	.47	.25	.43	.23	.42	.19	.39
Father attended college	.14	.34	.08	.28	.16	.37	.21	.41
Mother is high school grad	.42	.49	.37	.48	.37	.48	.37	.49
Mother attended college	.10	.30	.08	.27	.08	.27	.11	.31
Nontraditionality score (1982)	17.9	2.94	18.4	2.69	17.1	2.80	17.8	2.60
R expects to attend college (1982)	.49	.50	.66	.47	.35	.48	.32	.47
R expects to complete high school (1982)	.42	.50	.31	.46	.46	.50	.50	.50
Child is infant (under 3)	.71	.46	.66	.48	.79	.41	.77	.42
Child is toddler (3 to 5)	.22	.42	.23	.42	.17	.38	.18	.39
R has more than one child	.33	.47	.32	.47	.23	.42	.27	.45
Teenager (14 through 17) lives in home	.10	.30	.27	.44	.06	.23	.02	.15
Parent lives in home	.18	.38	.42	.50	.09	.28	.03	.17
R is employed	.84	.37	.74	.44	.93	.25	100.0	--

Table 53 Continued

	Mothers				Fathers			
	Total		Black		Total		Employed, married spouse present and spouse works	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Log hourly rate of pay	--	--	--	--	--	--	1.88	.42
Duncan SEI score	--	--	--	--	--	--	28.1	19.6
R lives in urban area	.79	.41	.87	.34	.77	.42	.71	.46
R lives in South	.42	.49	.62	.49	.38	.49	.39	.49
R lives in Northeast	.16	.37	.16	.37	.17	.37	.18	.39
R lives in West	.17	.37	.06	.23	.24	.43	.23	.42
Sample size	835		253		123		109	

Table 54 The Determinants of Patterns of Childcare Use for Mothers Who Use Childcare: Ordinary Least Square Results (Unstandardized Regression Coefficients)

	In home care		Family care		Childcare center		Hrs/wk uses childcare	
	All	Black	All	Black	All	Black	All	Black
Black	-.109[a]	--	.092[a]	--	.018	--	-.429	--
Hispanic	-.023	--	.021	--	-.004	--	-1.04	--
Poor white 1978	-.012	--	-.015	--	-.015	--	-1.45	--
Father is high school grad	-.0004	.068	-.075	.042	.015	.009	-.201	.340
Father attended college	-.029	-.157	-.043	.085	.105[b]	-.139	-.035	6.14
Mother is high school grad	-.0009	-.236[c]	-.066	-.212[b]	.066[b]	.134[a]	-.879	2.16
Mother attended college	-.037	-.152	-.146[b]	-.096	.096[b]	.189	-.793	3.77
Nontraditionality score (1982)	-.013[a]	.006	-.020[c]	-.001	.008[a]	-.003	.292	.145
R expects to attend college (1982)	.019	-.005	.080	-.062	-.056	.018	5.74[a]	10.0
R expects to complete high school (1982)	.047	-.044	.111	-.032	-.091	-.039	2.12	8.91
Child is infant (under 3)	-.024	-.066	.090	-.090	-.078	.332	16.2[c]	4.26
Child is toddler (3 to 5)	-.106	-.127	-.004	-.164	.057	.165	15.0[c]	4.68
R has more than one child	.125[c]	.047	.053	.146[a]	.059[b]	.019	-4.13[b]	-6.59
Teenager (14 through 17) lives in home	.011	-.010	.036	-.086	-.096	.093	-5.74[b]	-6.77
Parent lives in home	.232[c]	.413[c]	.075	.206[b]	-.045	.024	2.59	1.54
R is employed	-.064	-.123	.010	-.026	.029	.038	6.68[c]	1.54
R lives in urban area	-.056	-.141	-.025	-.144	.058[a]	.099	-3.83[a]	-5.18
R lives in South	-.200[c]	-.235[b]	-.161[c]	-.143	.166[c]	.137	1.55	-1.36
R lives in Northeast	.001	-.109	.025	-.042	.057	.162	-.544	.487

Table 54 Continued

	In home care		Family care		Childcare center		Hrs/wk uses childcare	
	All	Black	All	Black	All	Black	All	Black
R lives in West	-.209^c	-.080	-.158^c	-.260	.089	.125	-.302	.734
Constant	.912	.743	.960	1.08	-.106	-.164	2.73	15.6
R^2	.10	.27	.09	.14	.13	.10	.12	.12
Sample size	732	253	732	253	732	253	500	177

NOTE: See Glossary following Section V for complete specification of variables.

a = significant at .10 level
b = significant at .05 level
c = significant at .01 level

Consistent with our earlier supposition, mothers living in the West or the South tend to use less in-home and family care than women in the north central area of the United States. While living in the south appears to increase use of group care when all mothers who use childcare are pooled, this effect is not significant for blacks.

Use of in-home care, family care, group care, and frequency of use were also regressed on the same set of variables for working married fathers whose spouse is also employed. The results in Table 55 are based on equations in which wives have once again been excluded as providers of care. This result should be interpreted with care as the sample sizes for respondents in this category are quite small. The selection of this group of fathers was determined by the fact that more than 90 percent of the fathers in the sample who use childcare are employed and more than three fourths of them are married. Fathers with expectations of attending college are significantly less likely to depend on in-home or family childcare. They show a greater reliance on group care and a higher frequency of use relative to those who do not expect to high school school. This is consistent with the general pattern which has been evidenced throughout this analysis of parents with more education or higher aspirations being more likely to use group facilities. As in the outcome models for mothers, residence in the South leads to less in-home and family care and a greater probability of using a childcare center. Fathers living in the Northeast are about 30 percent more likely to use group care compared with those living in the North Central part of the country.

The above brief descriptors are certainly not intended to be definitive, but rather to suggest the extent to which there are varieties in the ability or willingness of young parents to seek a variety of childcare assistance.

Table 55 The Determinants of Patterns of Childcare Use Among Employed Working Married Fathers with Working Spouses: Ordinary Least Squares Results (Wives excluded as providers of care)
(Unstandardized Regression Coefficients)

	In home care	Family care	Childcare center	Hrs/wk uses childcare
Black	-.018	.100	-.099	-2.38
Hispanic	.098	-.063	.279	.565
Poor white 1978	-.302[a]	-.352[b]	.231[a]	-1.02
Father is high school grad	.111	.107	-.134	-11.9[b]
Father attended college	-.023	-.444[c]	.066	-8.27
Mother is high school grad	.037	.080	.040	1.41
Mother attended college	-.367	-.363[a]	.114	8.87
Nontraditionality score (1982)	.048[b]	-.010	.027	-1.42[b]
R expects to attend college (1982)	-.443[c]	-.345[b]	.309[b]	11.22[b]
R expects to complete high school (1982)	-.288[b]	-.155	.037	13.27[c]
Child is infant (under 3)	-.363[a]	-.174	.128	-6.26
Child is toddler (3 to 5)	-.499[b]	-.348[a]	.397[b]	-5.72
R has more than one child	.008	-.151	.182[a]	.219
Teenager (14 through 17) lives in home	-.189	-.239	.166	14.07
Parent lives in home	.795	.316	-.177	.137
Log hourly rate of pay	-.135	.034	.113	-10.18[b]
Duncan SEI score	.006[b]	.005[a]	-.008[c]	-.067
R lives in urban area	-.109	-.093	.003	-1.28
R lives in South	-.387[c]	-.276[a]	.429[c]	1.99
R lives in Northeast	-.125	.003	.308[b]	-7.61

Table 55 Continued

	In home care	Family care	Childcare center	Hrs/wk uses childcare
R lives in West	-.536[c]	-.175	.237	-4.96
Constant	.560	1.317	-.918	74.28
R^2	.50	.55	.48	.47
Sample size	99	100	100	94

NOTE: See Glossary following Section V for complete specification of variables.

a = significant at .10 level
b = significant at .05 level
c = significant at .01 level

They may also suggest areas where additional research, using the vast array of information available in this data set, may clarify, from a program or policy perspective, important childcare issues.

Finally, Table 56 suggests the extent to which the education, training and employment options of these young parents may be constrained by the lack of availability of adequate or appropriate childcare assistance. It may be ssen that only small proportions of fathers feel constrained, undoubtedly frequently reflecting the knowledge or feeling, realistic or otherwise, that the child's mother can watch the child.

In contrast, substantial proportions of young mothers indicate that they would either expand their current activities or seek to broaden the variety of their activities if satisfactory childcare were available at a reasonable rate. Indeed, 25 percent of employed mothers indicated they would have worked more hours if appropriate care were available and even more importantly, about 40 percent of non-working mothers indicated they would seek employment if they could find childcare assistance which would meet their needs. Comparable percents of young mothers indicate they would alter their behavior regarding schooling or training if appropriate childcare assistance were available.

V. THE PATTERNING OF TEENAGE SEXUAL BEHAVIORS AND ATTITUDES: SOME PRELIMINARY MULTIVARIATE RESULTS*

In this final analytical section, multivariate (ordinary least square) techniques are used to synthesize and elaborate on the variety of relationships suggested by the tabular material on fertility.[13] The results

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*Special thanks to William Marsiglio for his extensive assistance in the preparation of this section.

[13] This section draws heavily on the results and analysis presented in Mott (1983).

Table 56 Percent of Respondents Who Would Begin or Expand Activity if Satisfactory Child Care Available at a Reasonable Rate

	Males	Sample size	Females	Sample size
Percent who would[1]:				
Go to school more hours	11.3	51	19.0	141
Spend more hours in training	1.4	29	20.0	50
Work more hours	13.8	559	25.3	696
Percent who would[2]:				
Go to school	12.6	644	39.6	1764
Take training	13.2	611	39.5	1734
Go to work	10.6	34	40.8	905

[1] Limited to respondents already involved in specific activity.

[2] Limited to respondents not currently involved in specific activity.

presented here should be considered as preliminary and subject to revision, as they do not use the revised fertility variables that were adjusted following the earlier described data discrepancy analysis. It is unlikely, however, that the revisions will alter these results in any major way.[14]

In this section, we first focus in some detail on models examining the determinants of sexual activity and contraceptive use for younger (age 17 to 20) and older (age 21 to 25) men and women. Then, from what may be termed a life cycle perspective, we consider whether or not the patterning of the measurable determinants of a full range of female teenage sexual-related behaviors and attitudes fall into any coherent framework. That is, are we witnessing essentially random or disconnected behavior patterns or are there threads of continuity in the determinants of what are seemingly all fertility-related events--ranging from current sexual activity and contraceptive use (among young women age 17 to 20) to having an early (before age 17) pregnancy or birth, whether or not the early pregnancy or birth was (in a retrospective report) wanted, and whether or not the early pregnancy was aborted.

The analytical strengths of this data set rest on the knowledge that basic information on the sexuality of American youth has been collected for a large representative national sample and that to some extent the temporal ordering of relevant events and attitudes can be specified in such a way that causal inference may be possible. (See Mindick and Oskamp (1979) for a detailed discussion of these issues.) From a causal perspective, results presented here are far from definitive, but it is hoped that the tentative causal implications suggested will encourage other researchers to follow up more comprehensively on some of the issues raised.

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[14] While ordinary least square regressions are not necessarily the statistically most appropriate technique for presenting all of the materials in this section or those in the preceeding childcare section (particularly the models with particularly skewed dependent variables), for ease of presentation across models they are used here. Also, the identical models using logit techniques have already been run for a limited number of the models presented here and the patterns of statistical significance were essentially similar for the OLS and logit models.

A. The Multivariate Sample

Among the never married 17 to 20 year-olds in the sample, over 60 percent of the men and slightly under half of the women reported that they have been sexually active in the past month (see Table 57), with the majority of the sexually active of both sexes indicating that they generally use contraception. The young women apparently contracept more effectively than the young men. These results are generally consistent with results from other surveys.[15] Shifting to the overall sample of women, (see Table 58) regardless of marital status, only small percentages can be seen to have reported a birth or pregnancy before their 17th birthday and, also consistent with other studies, the majority of mothers report after the fact that the birth was not wanted at the time (Thornburg (1979); Lincoln, R., Jaffe, E.S. and Ambrose, A. (1976); Zelnik and Kantner (1980)) The above patterns were of course described in greater detail in Section IV.

From an analytical perspective, it is useful for the reader to bear in mind that changes in the determinants of sexual activity between the younger and older respondents may reflect to some extent the differential tendency of those who marry early to be different kinds of people than those who marry later--in terms of education, religion and other characteristics that will be

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[15] Because of differences in the nature of the samples, question wordings and timing of interviews, it is not possible to find other sources which are exactly comparable to our sample. However, our statistics on sexual activity and contraception do appear to be of the same order of magnitude as those cited, for example, in Zelnik and Kantner (1980) and Zelnik, Kantner and Ford (1981).

Table 57 Means for Selected Characteristics for Never Married Men and Women by Age in 1982

Characteristic	Male		Female	
	17-20	21 and over	17-20	21 and over
Percent with fathers who have attended college	30.3	32.2	29.8	33.6
Percent with mothers who have attended college	21.5	25.5	22.5	27.4
Percent Catholic in 1979	30.3	30.6	32.1	30.5
Percent Fundamental Protestant in 1979	26.7	24.3	27.8	26.9
Percent with no religion in 1979	10.7	14.5	8.3	10.3
Church attendance score (from 1 to 6) in 1979	3.36	2.76	3.70	3.17
Self esteem score in 1980	32.07	33.48	31.83	33.11
Non-traditionality score in 1979	10.28	10.69	11.75	12.02
Percent expecting to attend college as of 1979	42.4	45.7	51.3	54.8
Percent expecting to attend graduate school as of 1979	11.6	18.7	10.9	16.7
Percent living with two parents at age 14	81.7	84.6	80.8	84.0
Drug use score in 1980	1.728	2.733	1.543	2.166
Alcohol use score in 1982	1.490	1.812	0.744	0.939
Percent black	14.4	15.5	15.8	19.1
Percent Hispanic	6.1	4.6	5.8	4.5
Percent sexually active in past month	62.9	73.5	46.2	64.8
Percent (of sexually active) using contraception	75.6	84.7	80.3	87.1
Contraceptive effectively (for sexually active)	1.364	1.375	1.511	1.632
Percent contracepting effectively (of sexually active)[1]	60.2	60.8	70.4	76.3

NOTE: See Glossary at end of this section for complete definition of variables

[1] Effective contraception includes the following methods: pill, condom, diaphragm, IUD, female sterilization, and male sterilization. Ineffective contraception refers to natural family planning (or safe period by temperature or cervical mucus test), rhythm (or safe period by calendar), withdrawal, abstinence (or intercourse more than one month apart), foam, jelly or cream alone, suppository/insert, douching after intercourse, and any other unlisted method. In instances where the respondent was using both effective and ineffective contraception, the respondent was coded as using effective contraception.

Table 58 Means for Selected Characteristics in 1982 for all Men and Women by Age in 1982

Characteristic	Male		Female	
	17-20	21 and over	17-20	21 and over
Percent with fathers who have attended college	29.3	28.3	26.3	26.2
Percent with mothers who have attended college	20.7	21.9	19.7	20.8
Percent Catholic in 1979	30.0	29.7	29.6	29.4
Percent Fundamental Protestant in 1979	27.4	26.9	30.5	30.3
Percent with no religion in 1979	10.8	14.3	8.5	10.7
Church attendance score (from 1 to 6) in 1979	3.34	2.79	3.63	3.10
Self esteem score in 1980 (low to high register)	32.07	33.44	31.75	32.96
Non-traditionality score in 1979	10.27	10.57	11.67	11.70
Percent expecting to attend college as of 1979	41.0	42.6	48.1	48.2
Percent expecting to attend graduate school as of 1979	11.2	16.4	9.4	11.7
Percent living with parents at age 14	81.6	84.8	81.0	84.1
Drug use score in 1980	1.75	2.60	1.65	1.94
Alcohol use score in 1982	1.48	1.65	0.69	0.72
Percent black	13.9	13.2	14.1	13.9
Percent Hispanic	6.4	4.7	6.1	5.3
Percent with first birth before age 17			3.6	4.8
Percent with first birth conception before age 17			6.4	8.1
Percent with pregnancy occurring before age 17			9.1	9.6
Percent wanting pregnancy for birth began before age 17				33.5[a]
Percent wanting pregnancy for birth ending before age 17				30.2[a]
Percent wanting pregnancy occurring before age 17				29.4[a]

[a] Ages 17 to 25

NOTE: See Glossary at the end of this section for complete definition of variables.

reader should compare the characteristics in Tables 57 and 58. As will be suggested by the multivariate results that follow, a number of contrasting results between the determinants of sexual activity for younger and older youth may reflect this sample selection process.

B. The Determinants of Current Sexual Activity for Young Men and Women

Table 59 uses (OLS) multivariate regression techniques to examine the determinants of current (within the past 30 days) sexual activity for younger (17 to 20) and older (21 to 25) never married men and women.[16] These results are useful for comparing the determinants of relatively earlier and later sexual activity. To some extent, a comparison of sexual activity for never-married young men and women in these two age categories may be considered a comparison of sexual activity that is, if you will, more or less normatively acceptable according to the prevailing views of the society. Parallel models are presented in Table 59; one ("reduced") is limited to early background factors and the second ("full") includes a number of attitudes and behaviors that intervene between the early background factors and the outcome. That is they are at least partly a reflection of the background factors, but also, for the most part, are temporally antecedent (as measured in this longitudinal data set) to the sexual activity outcome.

The background variables are factors that have been generally considered by researchers possibly to be related to sexual mores and include variables reflecting the respondent's race and ethnicity, geographic residence, religious attachment, parent's education and parental home stability. (See

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[16] The forthcoming 1983 and 1984 surveys will include more extensive information on this topic including age at first intercourse and frequency of current sexual activities.

Table 59 Determinants of Sexual Activity During the Past Month by Age and Sex for Never-Married Respondents in 1982: Ordinary Least Square Results
(Unstandardized Regression Coefficients)

	Male				Female			
	17-20		21 and over		17-20		21 and over	
	Full	Reduced	Full	Reduced	Full	Reduced	Full	Reduced
Urban residence at age 14	.049^b	.042^a	-.084^c	-.084^c	.003	.002	.060^a	.067^b
Southern residence at age 14	.019	.018	-.005	-.002	-.043^a	-.037	-.038	-.041
Catholic 1979	.050^a	.054^b	.063^b	.070^b	.035	.039	.044	.052
Fundamental protestant 1979	.018	.029	.051	.055	.009	.021	-.002	-.001
No religious affiliation 1979	.021	.040	-.022	-.018	.064	.050	.018	.021
Church attendance 1979	.038^c	-.043^c	-.051^c	-.055^c	-.024^c	-.029^c	-.080^c	-.082^c
Hispanic	.062	.082^a	.068	.081	-.140^c	-.108^b	-.052	-.042
Black	.172^c	.223^c	.101^c	.156^c	.089^b	.152^c	.254^c	.290^c
Poor white 1978	.040	.067	.004	.005	.012	.059	.066	.064
Father completed 12 years school	-.024	-.045^a	.004	-.003	-.042	-.059^b	.006	.001
Father attended college	.023	-.026	-.038	-.056^a	-.052	-.102^c	.027	.021
Mother completed 12 years school	.013	-.010	.022	.015	-.018	-.040	-.006	-.009
Mother attended college	-.011	-.065^a	.003	-.017	-.033	-.086^b	-.051	-.055

Table 59 Continued

	Male				Female			
	17-20		21 and over		17-20		21 and over	
	Full	Reduced	Full	Reduced	Full	Reduced	Full	Reduced
Lived with two parents at age 14	.006	.011	.012	.004	-.091^c	-.107^c	-.045	-.047
Age 1982	.043^c	.033^c	.008	.007	.093^c	.085^c	.005	.004
Nontraditionality score 1979	.004	--	.014^b	--	.024^c	--	.010	--
Self esteem score 1980	-.003	--	.002	--	-.006^b	--	.005	--
Expect to attend college 1979	-.044^a	--	-.010	--	-.059^b	--	.022	--
Expect to attend school beyond college 1979	-.104^c	--	-.040	--	-.122^c	--	-.030	--
AFQT score	-.003^c	--	-.002^c	--	-.004^c	--	-.002	--
Constant	.133	.084	.691	--	-.832	.860	.557	.754
R^2 (adjusted)	.085^c	.068^c	.068^c	.060^c	.123^c	.092^c	.136^c	.134^c
F	11.04	11.44	6.80	7.80	14.33	13.85	10.75	13.76
N	2164	2164	1592	1592	1908	1908	1237	1237

a = Significant at .10 level.
b = Significant at .05 level.
c = Significant at .01 level.

See Glossary for complete specification of variables.

Dependent variable was coded (0) for not currently sexually active and (1) for currently sexually active.

for example, Chilman (1980) and Strahle (1983).) The full model includes in addition to these background factors other variables more directly related to an adolescent's current behavior and expectations. Specifically, two variables measuring the respondent's educational intentions as of 1979 are included. Presumably, women and men who intend to complete higher education independent of all other factors should follow a more "rational" fertility limiting life style (Goldsmith et al., (1972); Miller and Simon, (1974); Lindemann, (1974); Furstenberg (1975)). Women (and perhaps men) with less traditional views regarding appropriate roles for women (as of 1979) might be more sexually active but more careful about conceiving or having a child (see Fox, (1977); Cvetkovich et al., (1978)). There also is some evidence in the literature that sexual activity may be associated with self esteem, although the findings are inconsistent (see Jessor and Jessor, (1977), particularly chapter 5, for a discussion of this issue as well as Chilman (1980)).[17]

Highlighting briefly the results of Table 59, several results of some importance are suggested. First, for both younger and older men and women, the religious factor seems to be of some importance, even in 1982. Never-married respondents who report more extensive church attendance in 1979 are indeed less likely to report sexual activity three years later even after controlling for all the other factors in the model. However, particularly for the younger 17 to 20 year-olds, there is no strong evidence that attachment (or lack of attachment) to a particular religious denomination matters much; religiosity is important but the specific religion is far less important.

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[17] Parallel models, not presented here, included as additional explanatory variables whether or not the respondent had recently extensively used drugs or alcohol. The reason for including these variables was to consider whether or not there are adolescent life styles, including a range of what might be termed "non-normative" behaviors. Is there a syndrome of deviancy, if you will, which encompasses dimensions of sexuality, drug use, and alcohol use among older adolescents (Jessor and Jessor, (1977); Ch. 4). One alternative interpretation might be that there are subcategories of youth more willing to follow more adventuresome, exploratory, risk-taking lifestyles encompassing drug and alcohol use and an above average level of sexual activity. In this regard, it should be acknowledged that an overt association of this kind may also be at least partly a reflection of a greater willingness by some youths to admit to involvement in all of these activities. Because of the causal complexity inherent in these possible associations, these particular variables are not directly considered in this analysis. It is, however, useful to mention that these parallel models suggest powerful associations between drug use and early sexual activity, independent of all the other variables in the model.

From the racial and ethnic perspective, even after controlling for the various socioeconomic factors in the model, black male and female respondents at all ages have above average levels of sexual activity. Young Hispanic males are also slightly above average in this regard, whereas their female counterparts are significantly below average. Finally, white youth from economically disadvantaged (as measured by family poverty status in 1978) backgrounds are no more likely to be sexually active than the reference group of non-disadvantaged whites.

In general, the parental education factor is of some importance as an indirect determinant of teenage (17 to 20) sexual activity for both young men and women. With only the background factors in the model, young men and women with mothers who have attended college are less likely to be sexually active. Father's education is also relevant in this regard, but more so for the young women. This parental education effect dissipates to a considerable degree when the intervening and temporally more proximate adolescent behavior and attitude items are added to the model.

For young never-married women, a number of more temporally proximate factors, including having a traditional orientation regarding family and employment roles for women, expecting higher education, higher measured intelligence, and higher self-esteem, are significant predictors of less sexual activity at an early age. With the exception of the nontraditionality and self esteem measures, all of these factors are also significant predictors for younger men.

The high education expectation-higher AFQT score profile for less sexually active young women and men is certainly consistent with the notion that less sexual activity is one mechanism for assuring an ability to accomplish one's educational intentions. A nontraditional orientation for women is also, not surprisingly, associated with above average sexual activity; whether women with this philosophical orientation towards a life style compensate through the use of other fertility control mechanisms will be to some extent clarified below.

The significant inverse association between self esteem and sexual activity for women under the age of 20 is of some importance. In contrast, never-married women above the age of 20 who are sexually active have marginally above average self esteem scores. While the causes for this dramatic reversal in association cannot be fully unpackaged with this data set, further analyses considering temporally the associations among self esteem, educational and career orientations and related factors should provide some clarification. In any event, it is apparent that to the extent psychological factors affect sexual behavior, the associations are in all likelihood clouded by life cycle or maturational stage as well as (age-conditioned) sexual norms. In this case, regarding the association among self esteem, sexual activity, and age for the never-married women, it may well be that young women with low self esteem marry earlier and thus are more likely to be removed from the never-married pool by age 21. This is all confounded by the likelihood that the greater normative acceptability of sexual activity at the older ages may well cause sexual behavior to affect self esteem differently at the older than the younger ages.

While disguised in this presentation, it is also important to indicate that for younger women, low self esteem (as measured in 1980) as a predictor of sexual activity loses its significance when measures of drug and alcohol use are added to the model. (See the earlier discussion in footnote 17.) This finding suggests some important areas for subsequent research with this and other data sets. A syndrome of low self esteem being associated with drug and alcohol use and early sexual activity is one interpretation suggested by the alternate multivariate data not presented here but available from the author.

C. The Determinants of Contraceptive Use and the Effectiveness of Contraceptive Use for Young Men and Women

Even a casual examination of the determinants of current contraceptive use and effective contraception in Tables 60 and 61 suggests that there are very few meaningful predictors of this dimension of sexual behavior, at least among the variables available for use in this data set. For the young women, having a "non-religious" and a nontraditional orientation appear to be the only factors associated with an above average use of contraception. In the model for young men limited to the background factors, there does appear to be a complex of religious factors (church attendance, Catholicism) associated with less contraceptive use. Having a mother who attended college also was a significant predictor. All of these factors, however, vanish in importance when the more proximate variables are added to the model; however, in the full model, not a single variable attains significance as a predictor of contraceptive usage for teenage boys.

For the older respondents, urban residence, a number of parental education variables and higher self esteem are associated with above average contraception probabilities for women. Apparently, family influences are of

Table 60 Determinants of Contraceptive Use/Non Use by Age and Sex for Sexually Active, Never-Married Respondents in 1982: Ordinary Least Square Results (Unstandardized Regression Coefficients)

	Male				Female			
	17-20		21 and over		17-20		21 and over	
	Full	Reduced	Full	Reduced	Full	Reduced	Full	Reduced
Urban residence at age 14	-.040	-.035	.029	.034	-.012	-.007	.056[a]	.058[a]
Southern residence at age 14	-.015	-.009	.009	.007	.017	.014	.042	.047
Catholic 1979	-.069	-.070[b]	-.051	-.049	.016	.022	.034	.036
Fundamental protestant 1979	-.044	-.044	.010	.008	.012	.012	.095[b]	.094[b]
No religious affiliation 1979	-.077	-.081[b]	.007	.005	.088[a]	.098[a]	.030	.020
Church attendance 1979	-.015	-.014[a]	-.010	-.009	.005	.005	-.012	-.011
Hispanic	-.066	-.058	-.068	-.065	-.048	-.060	-.004	-.022
Black	.016	.015	-.073[a]	-.067[a]	.039	.024	-.060	-.083[b]
Poor white 1978	-.056	-.063	-.015	-.013	.005	-.022	.039	.025
Father completed 12 years school	-.003	-.003	.032	.035	-.043	-.035	.064[b]	.071[b]
Father attended college	.057	.066[a]	.055	.072[a]	-.025	$-.661\text{x}10^{-3}$	.071[a]	.098[c]
Mother completed 12 years school	-.016	-.017	.004	.015	.001	.022	.018	.038
Mother attended college	-.014	-.005	.058	-.034	.030	.071	.080[b]	.111[c]

Table 60 Continued

	Male				Female			
	17-20		21 and over		17-20		21 and over	
	Full	Reduced	Full	Reduced	Full	Reduced	Full	Reduced
Lived with two parents at age 14	.027	.028	.003	.009	.052	.049	.031	.043
Age 1982	$-.241\text{x}10^{-3}$	$.945\text{x}10^{-3}$	$.590\text{x}10^{-3}$	.003	$.031^{b}$	$.037^{c}$	.003	.005
Nontraditionality score 1979	-.009	--	$.621\text{x}10^{-3}$	--	$.013^{b}$	--	-.010	--
Self esteem score 1980	.003	--	.002	--	.004	--	$.006^{a}$	--
Expect to attend college 1979	.022	--	$.058^{a}$	--	.034	--	.043	--
Expect to attend school beyond college 1979	.087	--	.043	--	.066	--	.018	--
AFQT score 1981	$.149\text{x}10^{-3}$	--	$.780\text{x}10^{-4}$	--	$-.811\text{x}10^{-3}$	--	.001	--
Constant	.843	.830	.630	.667	-.183	.019	.447	.575
R^2 (adjusted)	$.009^{b}$	$.008^{b}$	.003	.003	$.021^{c}$	$.010^{a}$	$.069^{c}$	$.059^{c}$
F	1.62	1.69	1.15	1.20	1.92	1.60	3.96	4.31
N	1364	1364	1169	1169	882	882	796	796

[a] = Significant at .10 level.
[b] = Significant at .05 level.
[c] = Significant at .01 level.

See Glossary for complete specification of variables.

Dependent variable was coded (0) if not using any contraceptive method and (1) if using a contraceptive method.

Table 61 Determinants of Effective Contraceptive Use by Age and Sex for Sexually Active, Never-Married Respondents in 1982: Ordinary Least Square Results (Unstandardized Regression Coefficients)

	Male				Female			
	17-20		21 and over		17-20		21 and over	
	Full	Reduced	Full	Reduced	Full	Reduced	Full	Reduced
Urban residence at age 14	-.068	-.062	.077	.085	-.027	-.019	.115[a]	.120[a]
Southern residence at age 14	.013	.017	.055	.040	.076	.068	.098	.106[a]
Catholic 1979	-.125[b]	-.135[b]	-.108	-.105	.010	.023	.042	.042
Fundamental protestant 1979	-.044	-.051	.056	.043	.034	.036	.180[b]	.170[b]
No religious affiliation 1979	-.117	-.137[a]	-.009	-.013	.182[a]	.210[b]	.004	-.020
Church attendance 1979	-.026[a]	-.023	-.027	-.025	-.002	$.332 \times 10^{-5}$	-.027	-.024
Hispanic	-.155	-.156	-.159	-.172	-.143	-.183	.074	.042
Black	.027	-.003	-.152	-.171[b]	.065	.015	-.098	-.143[a]
Poor white 1978	-.094	-.122	-.018	-.009	.004	-.062	.094	.072
Father completed 12 years school	-.006	.008	.081	.097	-.109	-.087	.176[c]	.196[c]
Father attended college	.093	.125[a]	.118	.168[b]	-.088	-.031	.190[b]	.248[c]
Mother completed 12 years school	$-.836 \times 10^{-3}$	.006	-.021	.016	.014	.062	.071	.114[a]

Table 61 Continued

	Male				Female			
	17-20		21 and over		17-20		21 and over	
	Full	Reduced	Full	Reduced	Full	Reduced	Full	Reduced
Mother attended college	-.011	.029	-.110	-.045	-.004	.089	.100	.170^b
Lived with two parents at age 14	.041	.040	-.028	-.002	.116^a	.113^a	.025	.049
Age 1982	-.011	$-.101 \times 10^{-3}$	.017	.024	.070^c	.085^c	-.005	-.001
Nontraditionality score 1979	-.016	--	.005	--	.024^a	--	-.011	--
Self esteem score 1980	.013^a	--	.010	--	.010	--	.106	--
Expect to attend college 1979	.003	--	-.089	--	.054	--	.074	--
Expect to attend school beyond college 1979	.171^a	--	.035	--	.107	--	.059	--
AFQT score	.002	--	.002	--	.003	--	.003	--
Constant	1.341	--	.472	.804	-.686	-.201	.995	1.30
R^2 (adjusted)	.014^c	--	.015^b	.010^b	.029^c	.015	.058^c	.051^c
F	1.99	--	1.87	1.80	2.33	1.90	3.45	3.83
N	1364	1364	1169	1169	882	882	796	796

^{a} = Significant at .10 level.
^{b} = Significant at .05 level.
^{c} = Significant at .01 level.

See Glossary for complete specification of variables.

Dependent variable was coded (0) if not using method or pregnant, (1) if using ineffective method, e.g., douching, rhythm or withdrawal (2) if using effective method, e.g., condom, pill, sterilization, I.U.D., or diaphragm.

somewhat greater importance as predictors for youth passed adolescence. Perhaps these factors are replacing others which are more difficult to measure in a survey of this type--such as a variety of peer influences that may well be idiosyncratic to the particular circumstances of a youth and thus not be systematically associated with the kinds of demographic and socioeconomic factors best measured in this survey.

The models in Table 61 measuring the determinants of contraceptive effectiveness are almost equally as unsatisfactory, as shown by their predictive power. For young women, two of the three factors which predict contraceptive effectiveness are identical to those predicting contraceptive use, undoubtedly reflecting the overlap in the definition of the dependent variables.[18] A similar statement may be made for the four variables predicting contraceptive effectiveness for the older women.

Only for young men is there some substantial evidence of meaningful independent predictors of effective contraception. Young men from less religious homes who had expected (in 1979) to attend college and who had high self esteem are more likely to contracept effectively. It may well be that these background and personality characteristics represent a home family environment conducive to a more open discussion of family planning issues. That this pattern does not appear for teenage women may reflect the fact that sexual activity is considered more acceptable for teenage males than females, thus permitting more open or frank discussions in the home. Why this pattern is totally non-existent for the older men is not clear. In any event, the over-riding conclusion to be drawn from the models presented in this section is that explanations of teenage and young adult contracepting behavior are not easily found using large scale demographic/socioeconomic surveys.

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[18] "Currently contracepting" is coded 1 if contracepting and 0 if not contracepting. Effectively contracepting is coded 2 if "yes", 1 if ineffectively contracepting, and 0 if sexually active but not currently contracepting.

D. The Patterning of Adolescent Girls' Sexual Behavior and Attitudes

In this final analytical section, the focus is on the determinants of a full range of adolescent sex-related behaviors to consider whether or not there is any rational patterning of how youth think and behave in the sexual sphere. That is, are there any specific background or more proximate characteristics of young women that predict behavior in a consistent way. For example, can we find evidence of any factors that in a sense are consistently pro- or anti-natalist in their consequences?

Table 62 presents in a summary fashion the extent to which the early parental background factors are significant predictors of a full range of sex-related activities for young women, and Table 63 presents the same results for the models which include the full range of earlier and later background factors. (The full models, including coefficients, may be found at the end of this section.) The significant predictors of sexual activity and contraceptive usage (for never-married women) and early (before age 17) pregnancy and birth are synthesized in this table as are the predictors of early pregnancy and birth "wantedness" and abortion for the sample of 17 to 20 year olds.[19] Even a casual examination of this teenage sexual activity profile suggests results of some importance. Focusing first on Table 62, which is limited to the early background factors, the importance of the

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[19] It is acknowledged that the models specifying early birth and pregnancy outcome that include the proximate intervening factors have some causal difficulties. For a small part of the 17 to 20 year old group, the early birth event either occurred or could have occurred temporally at a point in time following the specification for the 1979 or 1980 explanatory attitudinal variables. Thus, an attitudinal response in these instances might represent a rationalization after the fact rather than a cause for the fertility behavior.

Table 62 Patterning of the Determinants of Sexual Behavior and Early Fertility Events and Their Wantedness for 17 to 20 Year-Old Women in 1982: Background Variables Only

	Women 17 to 20 years of age in 1982								
	Sexually active	Contra-cepting	Contra-cepting effec-tively	Pregnant before 17	First birth before 17	First birth conceived before 17	First pre-17 pregnancy was aborted	Wanted early first preg-nancy	Wanted early birth conceived before 17
Urban residence at age 14									
Southern residence at age 14							-a		
Catholic 1979						-b			
Fundamental protestant 1979									
No religious affiliation 1979		a	b						
Church attendance 1979	-c			-c				-a	-c
Hispanic	-b						-a		
Black	c			c	c	c	-b		-a
Poor white 1978				b		b	-a		
Father completed 12 years school	-b			-b		-b			
Father attended college	-c						c		

Table 62 Continued

	Women 17 to 20 years of age in 1982								
	Sexually active	Contra- cepting	Contra- cepting effec- tively	Pregnant before 17	First birth before 17	First birth conceived before 17	First pre-17 pregnancy was aborted	Wanted early first preg- nancy	Wanted early birth conceived before 17
Mother completed 12 years school				-c	-b	-c		-b	-b
Mother attended college	-b			-c	-c	-c	c		
Lived with two parents at age 14	-c		a	-c	-c	-c			
Age 1982	c	c	c						

NOTE: The following notation refers to statistical significance of unstandardized O.L.S. coefficient in model including all listed explanatory variables whose outcome noted at top of column is the dependent variable. See Glossary for complete specification of all variables. Sample for sexually active model includes all never married women. Sample for contracepting models are sexually active never married women. Sample for pre-age 17 pregnancy and birth models are all women. Samples for other models are self explanatory.

a = Significant at .10 level.
b = Significant at .05 level.
c = Significant at .01 level.

Table 63 Patterning of the Determinants of Sexual Behavior and Early Fertility Events and Their Wantedness for 17 to 20 Year-Old Women in 1982: All Variables

	Women 17 to 20 years of age in 1982								
	Sexually active	Contra-cepting	Contra-cepting effec-tively	Pregnant before 17	First birth before 17	First birth conceived before 17	First pre-17 pregnancy was aborted	Wanted early first preg-nancy	Wanted early birth conceived before 17
Urban residence at age 14									
Southern residence at age 14	-a			-a					
Catholic 1979									
Fundamental protestant 1979									
No religious affili-ation 1979		a	a						
Church attendance 1979	-c				-c				-a-c
Hispanic	-c								
Black	b			c	c	c		-b	-b
Poor white 1978									
Father completed 12 years school									
Father attended college							b		

Table 63 Continued

	Women 17 to 20 years of age in 1982								
	Sexually active	Contra-cepting	Contra-cepting effec-tively	Pregnant before 17	First birth before 17	First birth conceived before 17	First pre-17 pregnancy was aborted	Wanted early first preg-nancy	Wanted early birth conceived before 17
Mother completed 12 years school				-b		-b		-a	-b
Mother attended college				-c	-b	-c	b		
Lived with two parents at age 14	-c		a	-c	-c	-c			
Age 1982	c	b	c						
Women's nontraditionality 1979	c	b	a		-b				b
Self esteem 1980	-b			-a				a	
Expect to attend college 1979	-b			-c	-c	-c			
Expect post-graduate training 1979	-c			-b	-c	-b	b		
AFQT score 1981	-c			-c		-c	b	-c	-b

NOTE: See Table 59 for technical note.

[a] = Significant at .10 level.
[b] = Significant at .05 level.
[c] = Significant at .01 level.

religion and education factors is apparent. Church attendance not only is associated with lower levels of reported sexual activity but, in addition, with lower levels of reported early pregnancy (but not with different levels of contraception or abortion!). In other words, there is surface evidence that religiosity may translate into reduced early fertility through abstinence, but not through differential contraceptive behavior. Church attendance is also associated with verbally reporting after the fact that the early pregancy or birth was not wanted.

Similarly, having a mother or father who had more education is associated with less sexual activity and significantly less early fertility behavior. In the parental education case, however, in contrast with the religion factor, abortion may also be seen to be an associated mechanism for controlling fertility.

In contrast with the above two factors, stability of family background appears to have an effect on reducing fertility through the dual mechanisms of abstinence and contraception. That is, living with two parents during adolescence is associated with significantly below average sexual activity, above average contraceptive use and less early childbearing.

From a policy perspective, perhaps the most disconcerting finding of this study pertains to black young women. After controlling for all the other factors, black young women are more sexually active, more likely to become pregnant, less likely to have an abortion, and significantly less likely, after the fact, to have wanted their early birth. Given the fact that all of these factors (with the exception of wantedness) operate in a pro-natalist direction, it is somewhat disconcerting to see no evidence of a positive association between this race variable and contraception.

Economically disadvantaged white youth show some, but not all, of these pronatalist tendencies; they have above average probabilities of an early pregnancy or birth, below average reported abortion probabilities, but are not unlike other white youth (the residual race category left out as the reference group) in their pattern of sexual activity. It is suggested that the importance of cultural factors *per se* can perhaps be summarized most succinctly by the three race/ethnicity variables in the sexual activity model; all three groups--the blacks, Hispanics and poor whites are essentially economically disadvantaged but the first is above average, the second below average and the third average in its level of sexual activity.

Table 63 includes the identical range of outcome variables but also includes the more proximate adolescent explanatory variables. The importance of childhood *and* early adolescent socialization processes should be evident; educational expectations for college or post-graduate training (as of 1979) are important predictors of less sexual activity and lower early fertility. Also, expecting post-graduate education as of 1979 is predictive of an above average probability of having an abortion, if one did become pregnant. To some extent, the parental education variables in the full model have become reduced in importance, suggesting the significance of the youth's own educational expectations as intervening factors between parental education and later fertility-related outcomes.

The youth's score on the Armed Forces Qualification Test (taken by over 95 percent of the respondents in the survey), whether interpreted as an intelligence measure, a proxy for general awareness, or as a meaningful indicator of an ability to make more rational decisions, certainly provides strong and consistent anti-natalist results. Young women with higher scores on the test were less sexually active, less likely to have an early pregnancy or birth, more likely to have an abortion and, finally, less likely to want the pregnancy if it did occur. Thus, in many ways, its effects parallel those of both the youth's own educational expectations as well as the parental education factor. While a post hoc statement regarding non-wantedness of a birth obviously can no longer prevent that birth, it may be predictive of a reduced probability of repeating the same birth or pregnancy process. Subsequent analyses with this data set will clarify the issue.

Young women with less traditional life style (regarding family and employment) orientations in 1979 also show rationally consistent fertility behavior. As indicated earlier, nontraditionality is associated with a greater level of sexual activity. However, it is also associated with an above average tendency to use contraception and lower early fertility. Also, as noted earlier, there is marginal evidence that young women with greater self esteem are less sexually active, less likely to have an early birth, but, in this case, more likely to have wanted the pregnancy if they had it.

What all the findings above suggest is that even large scale surveys such as the NLS, while not perfect vehicles for dealing with social-psychologically based outcomes, are nonetheless extremely useful for providing insights into individual level behaviors. While no one model in this schema tells a comprehensive story, the patterning of the overall results suggests strongly the importance of socialization and social-psychological considerations as fertility behavior determinants. In the context of our contemporary society, early motivation regarding careers, role orientation in general and even determinants of inner security appear to be important determinants of sexual behavior. The temporal dimensions of the NLS data set can be used to at least partially clarify a number of these issues in a more comprehensive manner than was attempted in this evaluation document.

Table [illegible]: Background Determinants of Early (Before 17) Fertility Events and their Wantedness by Age for All Women: Ordinary Least Square Results

(Unstandardized Regression Coefficients)

Reduced Models	Early pregnancy		Early abortion		First birth conceived before 17		First birth occurring before 17		Want early first pregnancy before 17		Want early birth conceived before 17		Want early birth occurring before 17	
	17-20	21+	17-20	21+	17-20	21+	17-20	21+	17-20	21+	17-20	21+	17-20	21+
Urban residence at age 14	-.016	.013	.080	.072	-.018	.007	-.008	-.002	.007	-.041	-.013	-.032	.005	-.022
Southern residence at age 14	-.020	.013	$-.118^a$	.039	-.005	.020	-.001	$.020^b$	.013	.054	-.029	.035	-.063	.097
Catholic 1979	-.004	$.593\times10^{-3}$	.084	-.081	$-.012^b$	.007	-.005	.011	-.006	$.244^b$	.015	.165	.005	.237
Fundamental protestant 1979	.005	$.033^b$	-.063	$-.110^b$	.005	$.031^a$	-.004	$.038^c$	.043	$.182^a$	.044	$.161^a$	.085	$.157^a$
No religious affiliation 1979	.026	.019	-.135	-.059	.021	.001	.020	.008	.101	$.210^a$	.007	$.219^a$	.010	$.209^a$
Church attendance 1979	$-.012^c$	$-.020^c$	-.018	$-.023^a$	-.006	$-.018^c$	-.004	$-.015^c$	$-.037^a$	.023	$-.073^c$	.015	-.044	-.006
Hispanic	.017	$.069^c$	$-.194^a$	-.070	.023	$.050^a$	.006	$.035^a$	.186	-.057	.159	.042	.272	.225
Black	$.078^c$	$.125^c$	$-.146^b$	-.056	$.075^c$	$.123^c$	$.050^c$	$.078^c$	-.100	$-.246^c$	$.166^a$	$-.266^c$	-.095	$-.092^c$
Poor white 1978	$.064^b$	$.064^c$	$-.182^a$	-.004	$.052^b$	$.054^c$	.029	.014	.076	-.025	.013	.027	.052	.113
Father completed 12 years school	$-.028^b$	-.015	-.007	-.007	$-.030^b$	-.009	-.013	$.222\times10^{-3}$	.047	.086	.075	.077	-.011	$.234^b$
Father attended college	-.010	$-.034^b$	$.232^c$	.019	-.018	-.024	-.009	-.010	.015	-.137	.155	-.119	-.014	-.114
Mother completed 12 years school	$-.053^c$	$-.074^c$	-.050	.066	$-.041^c$	$-.082^c$	$-.023^b$	$-.045^c$	$-.156^b$	-.027	$-.211^b$	.012	$-.216^a$	.012

Table 64 Continued

Reduced Models	Early pregnancy		Early abortion		First birth conceived before 17		First birth occurring before 17		Want early first pregnancy before 17		Want early birth conceived before 17		Want early birth occurring before 17	
	17-20	21+	17-20	21+	17-20	21+	17-20	21+	17-20	21+	17-20	21+	17-20	21+
Mother attended college	-.100^c	-.080^c	.446^c	.023	-.083^c	-.089^c	-.047^c	-.044^c	-.234	-.074	-.206	-.004	-.392	.068
Lived with two parents at age 14	-.047^c	-.032^c	.032	.029	-.047^c	-.039^b	-.032^c	-.034^c	-.052	-.040	-.049	-.029	-.070	.031
Age 1982	$.809\times10^{-3}$	-.003	.003	-.009	-.002	-.002	.001	.002	-.015	.003	-.015	.008	.039	-.002
Constant	.213	.251	.230	.316	.215	.234	.079	.088	.680	.182	.929	.111	-.220	.147
R^2 (adjusted)	.053^c	.096^c	.222^c	.034	.059^c	.099^c	.033^c	.076^c	.014	.028	.055	.027	-.04	.003
F	9.62	18.52	4.53	1.49	10.66	19.13	6.23	13.51	1.20	1.43	1.57	1.38	.790	1.03
N	2312	2471	186	213	2312	2471	2312	2471	201	227	147	210	82	125

^{a} = Significant at .10 level.
^{b} = Significant at .05 level.
^{c} = Significant at .01 level.

See Glossary for complete specification of variables.

Table 65 Determinants of Early (Before 17) Fertility Events and Their Wantedness for 17-20 Year Old Women: Ordinary Least Squares Results
(Unstandardized Regression Coefficients)

Full Models	Early pregnancy	Early abortion	Live birth conceived before 17	Live birth occurring before 17	Want early first pregnancy	Want live birth conceived before 17	Want live birth occurring before 17
Urban residence at age 14	-.017	.083	-.019	-.008	.006	-.039	-.030
Southern residence at age 14	-.025^{a}	-.107	-.009	-.003	.022	-.016	-.030
Catholic 1979	$-.473 \times 10^{-3}$	.089	-.009	-.003	.008	.056	-.013
Fundamental protestant 1979	-.005	-.066	-.004	-.009	.011	.032	.033
No religious affiliation 1979	.032	-.133	.027	.023	.084	.022	-.022
Church attendance 1979	-.010^{c}	-.024	-.005	-.002	-.035^{a}	-.068^{c}	-.033
Hispanic	.005	-.145	.012	.004	.119	.120	.214
Black	.065^{c}	-.081	.062^{c}	.048^{c}	-.192^{b}	-.233^{b}	-.192
Poor white 1978	.039	-.137	.032	.018	.050	.005	.067
Father completed 12 years school	-.017	-.004	-.020	-.007	.029	.064	-.037
Father attended college	.021	.193^{b}	.008	.007	.056	.205	-.031
Mother completed 12 years school	-.035^{b}	-.103	-.026^{b}	-.013	-.123^{a}	-.200^{b}	-.196
Mother attended college	-.062c	.332^{b}	-.053^{c}	-.027^{b}	.153	-.200	-.449

Table 65 Continued

Full Models	Early pregnancy	Early abortion	Live birth conceived before 17	Live birth occurring before 17	Want early first pregnancy	Want live birth conceived before 17	Want live birth occurring before 17
Lived with two parents at age 14	-.042^c	.032	-.044^c	-.031^c	-.028	-.020	-.012
Age 1982	.006	-.153	.002	.003	-.022	-.031	.022
Nontraditionality score 1979	-.001	.009	-.003	-.004^b	.019	.035^b	.029
Self esteem score 1980	-.003^a	$-.403 \times 10^3$	-.001	$.340 \times 10^{-3}$	.016^a	.016	.027^b
Expect to attend college 1979	-.070^c	.002	-.052^c	-.043^c	-.026	-.067	-.057
Expect to attend school beyond college 1979	-.058^b	.305^b	-.045^b	-.044^c	-.007	.061	-.082
AFQT score 1981	-.001^c	.004^b	-.001^c	$-.336 \times 10^{-3}$	-.007^c	-.006^b	-.006
Constant	.311	-.036	.297	.124	.473	.662	-.705
R^2 (adjusted)	.076^c	.259^c	.079^c	.049^c	.044	.088^b	-.021
F	10.54	4.24	10.90	7.01	1.46	1.71	.917
N	2312	186	2312	2312	201	147	82

^{a} = Significant at .10 level.
^{b} = Significant at .05 level.
^{c} = Significant at .01 level.

See Glossary for complete specification of variables.

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GLOSSARY

AGE

Current age as of 1982 interview.

AFQT PERCENTILE SCORE

Over 95% of the NLS youth cohort were administered the Armed Forces Qualification Test (AFQT) during the 1981 summer. This test determines eligibility for enlistment in the armed forces. It consists of the sum of the number of correct scores for the following sections of ASVAB: arithmetic reasoning + word knowledge + paragraph comprehension + 1/2 (numerical operations). The test has a theoretical range of 0-105.5 and for the purposes of this study raw scores were converted into percentile values by rounding and dividing by 105.

ALCOHOL USE 1982

Respondents were asked "How often have you had 6 or more drinks on one occasion during the last 30 days?" and categorized (0) never (1) once (2) 2 or 3 times (3) 4 or 5 times (4) 6 or 7 times (5) 8 or 9 times (6) 10 or more times.

CATHOLIC 1979

DUMMY-Takes a value of 1 if present religion as of 1979 interview was Roman Catholic, 0 otherwise.

CHURCH ATTENDENCE 1979

Religious service attendence during last year (1) not at all (2) several times a year or less (3) about once a month (4) two or three times a month (5) about once a week (6) more than once a week.

COLLEGE EXPECTATIONS AS OF 1979

DUMMY-Respondents were asked, "what is the highest grade or year you think you will actually complete?" Takes a value of 1 if respondent expected between 13-16 years, 0 otherwise.

CONTRACEPTIVE USE/NONUSE

DUMMY-Takes a value of 1 if respondent was using any contraceptive method, 0 otherwise. Pregnant respondents were coded 0.

CONTRACEPTIVE USE/NONUSE EFFICIENCY

Respondents coded (0) not using method or pregnant (1) using inefficient method (2) using efficient method.

DRUG USE 1980

Estimated number of times within the last year that respondent had smoked marijuana or hashish given the following categories: (0) never (1) once (2) twice (3) 3-5 times (4) 6-10 times (5) 11-50 times (6) more than 50.

EARLY ABORTION

DUMMY-Takes a value of 1 if respondent reported an aborted pregnancy conceived before 17, early pregnancies resulting in live births coded 0. Miscarriages and stillbirths were excluded from this variable creation.

EARLY PREGNANCY BEFORE 17

DUMMY-An approximate conception date in century months based on 1900 was calculated for a respondent's first pregnancy. For live births the conception date was estimated as the baby's birth date minus nine months. In those cases where a pregnancy did not result in a live birth, the number of months the pregnancy lasted was subtracted from the termination date. The conception date in century months was then subtracted from a respondent's own birth date in century months. An early pregnancy was considered to have occurred if the respondent's age at estimated conception was equal to or less than 203 months or 16 years, 11 months. Early pregnancies were coded 1, 0 otherwise.

EFFECTIVENESS OF CONTRACEPTIVE METHOD

Respondents coded (1) if sexually active but not using a contraceptive method, (2) if sexually active and using an inefficient method, e.g., douching, rhythm, or withdrawal, (3) if sexually active and using effecient contraceptive method, e.g., condom, pill, sterilization, I.U.D., or diaphragm, and (4) if not sexually active.

FATHER'S COLLEGE EDUCATION

DUMMY-Takes a value of 1 if the highest year of school the respondent's father completed was equal to or greater than 13, 0 otherwise.

FATHER'S HIGH SCHOOL EDUCATION

DUMMY-Takes a value o 1 if the highest year of school the respondent's father completed was equal to 12, 0 otherwise

FUNDAMENTALIST PROTESTANT IN 1979

The National Opinion Research Center's (1981) coding scheme was used to differentiate Fundamentalists from Non-Fundamentalists. The only exception taken to NORC's classification scheme was that all Baptists were categorized as Fundamentalists. Takes a value of 1 if respondent's 1979 religion was classified as Fundamental, 0 otherwise (see, Chi, 1982 for a more detailed discussion of the present coding scheme).

LIVE BIRTH OCCURRING BEFORE 17

DUMMY-Takes a value of 1 if respondent had a live first birth before 17, births after 17 coded 0.

LIVE BIRTH CONCEIVED BEFORE 17

DUMMY-Takes a value of 1 if a live first birth was conceived before the respondent was 17, conceptions after 17 coded 0.

LIVING WITH TWO PARENTS AT AGE 14

DUMMY-Takes value of 1 if respondent was living with two parents at age 14, at least one of whom he/she referred to as a mother or father and the other as a step-parent, 0 otherwise.

MOTHER'S COLLEGE EDUCATION

DUMMY-Takes a value of 1 if highest year respondent's mother completed was equal to or greater than 13, 0 otherwise.

MOTHER'S HIGH SCHOOL EDUCATION

DUMMY-Takes a value of 1 if highest grade respondent's mother completed was equal to 12, 0 otherwise.

NON TRADITIONALISM SCALE

Four items were scaled to provide a measure of individuals' sex-role attitudes regarding wives' employment and household responsibilities. Respondents were asked how strongly they agreed or disagreed with the following statements:

a) A woman's place is in the home, not in the office or shop.
b) A wife who carries out her full family responsibilities doesn't have time for outside employment.
c) It is much better for everyone concerned if the man is the achiever outside the home and the woman takes care of the home and family.
d) Women are much happier if they stay at home and take care of their children.

Selection of these items was based on an initial factor analysis of six employment related questions appearing on the 1979 NLS Youth Survey. A simple factor was identified by using principal factoring with iterations. The rotated varimax solution revealed that the four items subsequently scaled loaded reasonably well on this one dimension (.72, .62, .70, .62). Chronbach's reliability α was .765 for the four selected items.

Questions were scored from 1-4 and coded so that lower scores reflected more traditional attitudes and higher scores represented more modern or egalitarian types of responses. The items were then summed to create a scale having a theoretical range of 4-16. Listwise deletion was employed in calculating scale values for individual respondents. The scale had a $\bar{x}$ = 11.07 and so = 2.42.

NO RELIGION 1979

DUMMY-Takes a value of 1 if respondent had no present religion as of the 1979 interview, 0 otherwise.

POOR WHITE

DUMMY-Takes a value of 1 for white respondents meeting the Office of Management and Budget's criteria for poverty in 1978 when the sample was selected, 0 otherwise.

POST COLLEGE EXPECTATIONS AS OF 1979

DUMMY-Respondents were asked in 1979, "what is the highest grade or year you think you will actually complete?" Takes a value of 1 if the respondent expected at least 17 years, 0 otherwise.

SELF-ESTEEM SCALE

Rosenberg's (1965) ten item scale was used to measure respondent's self esteem. Respondents were asked in 1980 to indicate how much they agreed or desagreed with a series of statements which represented opinions people have about themselves. For example, "I feel that I have a number of good qualities," and "I wish I could have more respect for myself." Items were scored from 1-4 and coded so that 1 represented the lowest value of self esteem and 4 represented the highest value. A self esteem scale value was obtained for individual respondents by summing the ten items while using listwise deletion. The scale's theoretical range is 10-40 and for the present sample it had a $\bar{x}$ = 32.53 and STD = 4.08. Chronbach's reliability coefficient was α = .836 for these items. For a more thorough discussion of Rosenberg's scale see Wylie (1974 and 1979).

SEXUAL ACTIVITY

DUMMY-Takes a value of 1 if currently sexually active (within past 30 days), 0 otherwise.

SOUTHERN RESIDENCE AT AGE 14

DUMMY-Takes a value of 1 if respondent lived in southern region of United States at age 14, 0 otherwise.

URBAN RESIDENCE AT AGE 14

DUMMY-Takes a value of 1 if respondent indicated that he/she lived in a town or city at age 14, 0 otherwise.

WANT EARLY FIRST PREGNANCY

DUMMY-Two questions were used to create this variable. If respondents experienced an early pregnancy and answered "yes" to the following question, "was the reason you (were not/stopped) using any methods because you yourself wanted to become pregnant?" they were coded 1. Likewise, if they responded "yes" or "didn't matter" to the question, "just before you became pregnant the first time, did you want to become pregnant when you did?" they were code 1. Respondents were coded 0 if they answered "no" to the latter question.

WANT LIVE BIRTH OCCURRING BEFORE 17 (FIRST PREGNANCY)

DUMMY-Takes a value of 1 for respondents having a live first birth before 17 and who wanted the pregnancy, and 0 for those not wanting the early pregnancy.

WANT LIVE BIRTH CONCEIVED BEFORE 17 (FIRST PREGNANCY)

DUMMY-Takes a value of 1 for respondents conceiving a live first birth before 17 and who wanted the pregnancy, and 0 for those not wanting the early pregnancy.

LIST OF VARIABLES ON
SUPPLEMENTARY FERTILITY TAPE

VBL. #	TITLE
1	Has R ever had any children? 79 Int.
2	Number of children R has had, 79 Int.
3	Month of birth of first child, 79 Int.
4	Day of birth of first child, 79 Int.
5	Year of birth of first child, 79 Int.
6	Month of birth of second child, 79 Int.
7	Day of birth of second child, 79 Int.
8	Year of birth of second child, 79 Int.
9	Month of birth of third child, 79 Int.
10	Day of birth of third child, 79 Int.
11	Year of birth of third child, 79 Int.
12	Month of birth of fourth child, 79 Int.
13	Day of birth of fourth child, 79 Int.
14	Year of birth of fourth child, 79 Int.
15	Month of birth of fifth child, 79 Int.
16	Day of birth of fifth child, 79 Int.
17	Year of birth of fifth child, 79 Int.
18	Has R had any children since last Int? 80 Int.
19	Number of children R has had since last Int. 80 Int.
20	Month of birth of first child born since last Int., 80 Int.
21	Day of birth of first child born since last Int., 80 Int.
22	Year of birth of first child born since last Int., 80 Int.
23	Has R had any children since last Int? 81 Int.
24	Number of children R has had since last Int., 81 Int.
25	Month of birth of first child born since last Int., 81 Int.
26	Day of birth of first child born since last Int., 81 Int.
27	Year of birth of first child born since last Int., 81 Int.
28	Month of birth of second child born since last Int., 81 Int.
29	Year of birth of second child born since last Int., 81 Int.
30	Has R ever had any children? 82 Int.
31	Number of children R has had. 82 Int.
32	Month of birth of first child, 82 Int.
33	Day of birth of first child, 82 Int.
34	Year of birth of first child, 82 Int.
35	Month of birth of second child, 82 Int.
36	Day of birth of second child, 82 Int.
37	Year of birth of second child, 82 Int.
38	Month of birth of third child, 82 Int.
39	Day of birth of third child, 82 Int.
40	Year of birth of third child, 82 Int.
41	Month of birth of fourth child, 82 Int.
42	Day of birth of fourth child, 82 Int.
43	Year of birth of fourth child, 82 Int.
44	Sex of first child, 82 Int.
45	Sex of second child, 82 Int.
46	Sex of third child, 82 Int.
47	Sex of fourth child, 82 Int.
48	Residence of first child, 82 Int.
49	Residence of second child, 82 Int.
50	Residence of third child, 82 Int.
51	Residence of fourth child, 82 Int.

52	Month of death of third child, 82 Int.
53	Year of death of third child, 82 Int.
54	Month R began first pregnancy as of 1982 Interview
55	Year R began first pregnancy as of 1982 Interview
56	Number of pregnancies as of 1982 Interview
57	Number of live births as of 1982 Interview
58	Number of miscarriages as of 1982 Interview
59	Number of abortions as of 1982 Interview
60	Age of R at first birth as of 1982 Interview
61	Age of R at second birth as of 1982 Interview
62	Age of R at third birth as of 1982 Interview
63	Months between R's first and second births as of 1982 Interview
64	Months between R's second and third births as of 1982 Interview
65	Month R began first marriage as of 1982 Interview
66	Year R began first marriage as of 1982 Interview
67	Month R ended first marriage as of 1982 Interview
68	Year R ended first marriage as of 1982 Interview
69	Age R began first marriage as of 1982 Interview
70	Month R began second marriage as of 1982 Interview
71	Year R began second marriage as of 1982 Interview
72	Months between R's first marriage and first birth as of 1982 Interview
73	Number of R's own children in household, 1979 Interview
74	Number of R's own children in household, 1980 Interview
75	Number of R's own children in household, 1981 Interview
76	Number of R's own children in household, 1982 Interview
77	Age of R's youngest child in household, 1979 Interview
78	Age of R's youngest child in household, 1980 Interview
79	Age of R's youngest child in household, 1981 Interview
80	Age of R's youngest child in household, 1982 Interview
81	Consistency of Fertility Report, 1979 to 1982
82	Sex of R, 79 Int.
83	R's Racial Ethnic Cohort From Screener, 79 Int.
84	Identification Code

The Center has also been active in manpower planning both in the U.S. and in the developing countries. A project for the Ohio Advisory Council for Vocational Education identified the highly fragmented institutions and agencies which supply vocational and technical training in Ohio. Subsequent projects for the Ohio Occupational Information Coordinating Committee have followed graduates of these programs. These data and information on occupational distributions of employers collected for the Occupational Employment Statistics Program are being integrated into a comprehensive planning model which will be accessible to trainees and employers and linked to a national network.

Another focus of the Center's research is industrial relations and collective bargaining. In a project for the U.S. Department of Labor, staff members are working with unions and management in a variety of industries to evaluate several current experiments for expedited grievance procedures. The procedural adequacies, safeguards for due process, and cost and timing of the new procedure are being weighed against traditional arbitration techniques.

Senior staff also serve as consultants to many boards and commissions at the national and state level. Recently the Center's staff have produced papers and prepared testimony for the Department of Labor, the Vice President's Task Force on Youth Unemployment, the Joint Economic Committee of Congress, the National Commission for Employment and Unemployment Statistics, the National Commission for Employment Policy, the White House Conference on the Family, the Ohio Department of Corrections, the Ohio Board of Regents, the Ohio Governor's Task Force on Health, and the Ohio Governor's Task Force on Welfare.

The Center maintains a working library of approximately 10,000 titles, including a wide range of reference works and current periodicals, as well as an extensive microfilm and microfiche collection. Through their facilities linked to the University computer, the Center's data processing staff provide statistical, technical, and programming support both for in-house researchers and the over 250 users of the National Longitudinal Surveys data tapes. They maintain the NLS tapes, data base, documentation, and associated software.

For information on specific Center activities, write: Director, Center for Human Resource Research, 5701 North High Street, Worthington, Ohio 43085.

OSU

The Ohio State University

The Center for Human Resource Research
5701 North High Street
Worthington, Ohio 43085

Center for Human Resource Research

The Center for Human Resource Research is a policy-oriented multidisciplinary research organization affiliated with The Ohio State University. Established in 1965, the Center is concerned with a wide range of contemporary problems related to developing and conserving human resources. Its more than thirty senior staff members come from disciplines including economics, education, English, health sciences, industrial relations, management science, psychology, public administration, social work, and sociology. This multidisciplinary team is supported by approximately 70 graduate research associates, full-time research assistants, computer programmers, and other personnel.

The Center has become preeminent in the fields of labor market research and manpower planning. With continuing support from the United States Department of Labor, the Center has been responsible since 1965 for the National Longitudinal Surveys of Labor Market Experience. Staff have assisted in population and human resource planning throughout the world, having conducted major studies in Bolivia, Ecuador, Kenya, Sierra Leone, Venezuela, and Zaire. At the request of the National Science Foundation, a review of the state of the art in human resource planning was conducted. Other studies have assessed the impact of labor and education policy on labor supply and evaluated employment statistics collection methods. Senior personnel are also engaged in several other areas of research—collective bargaining and labor relations, evaluation and monitoring of the operation of government employment and training programs, and the projection of health education and facility needs.

The Center for Human Resource Research has received over two million dollars annually from government agencies and private foundations to support its research in recent years. Providing support have been the U.S. Departments of Labor, State, Defense, Education, Health and Human Services; Ohio's Health and Education Departments and Bureau of Employment Services; the Ohio cities of Columbus and Springfield; the Ohio AFL-CIO; the George Gund Foundation; the Rockefeller Foundation; and the Ford Foundation. The breadth of the Center's research interests is best illustrated by a brief review of a few of its current projects.

The Center's largest project is the National Longitudinal Surveys of Labor Market Experience. This project has involved repeated interviews over a fifteen-year period with four groups of the United States population: older men, middle-aged women, and young men and women. The data are collected for 20,000 individuals by the U.S. Bureau of the Census, and the center is responsible for data analysis. Since 1979, the NLS has followed an additional cohort of 13,000 young men and women between the ages of 14 and 21. This cohort includes for the first time those serving in the armed forces at the time of the initial interview. In addition to being the definitive U.S. national data set on the labor market activities of young adults, this continuing survey includes unique batteries of questions on such socially important issues as delinquency, alcohol and drug use, fertility, and prenatal care. For this cohort, field work is handled by the National Opinion Research Center. To date the Center's staff have prepared dozens of research monographs, special reports, and books on the NLS, and they also prepare and distribute data tapes for public use.

The Quality of Work Life Project, another ongoing study, began in 1975 as an attempt to improve the productivity and the meaningfulness of work for public employees in the cities of Springfield and Columbus. Center staff also served as third party advisers and researchers exploring new techniques for attainment of management-worker cooperation and worker health in a number of central Ohio private sector industries.

(Continued on inside back cover)